

Designing Online Curriculum: Program Revisions and Knowledge Exchange

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Abstract

In this article, I focus on the importance of knowledge exchange and knowledge communities to create an online curriculum that moves from individual course design to shared curriculum design. I draw from current discussions on communities of practice, agoras, and knowledge societies, expanding on the notion that knowledge, in order to benefit society, has to be shared. I show the results of a program redesign at Northern Arizona University achieved through collaboration on online course learning outcomes as well as course design, and I conclude by arguing for continued assessment of current practices to encourage educators to think critically about their contributions to an open knowledge society.

Keywords: curriculum redesign, online graduate program, knowledge communities, open knowledge exchange, faculty collaboration, student learning

Introduction

Faculty at my institution share knowledge—formally and informally—on an ongoing basis. We talk in hallways, in our offices, and in department meetings. We publish articles on subject-specific issues. We go to conferences and discuss new developments in our fields of expertise. We are happy to receive feedback that will push our research in a new direction. However, when it comes to course redesign and curriculum revisions, we often consider requests for changes to an established syllabus as threatening our authority, and with it academic freedom. Mimeographed course syllabi, with only the semester and year changed, were part of the academic culture before computer technology made it easier to quickly update to a new semester. But despite the increased ease of making necessary changes, the substance of many courses often remains unchanged for many years. Participating in an open exchange of knowledge, although valued and promoted for research purposes and for discussing overall pedagogical approaches in the classroom, often stops before it impacts course and program redesign.

This approach to curricular discussions is not unusual. As Linda Darling-Hammond and Bransford (2005) point out in their research on teacher education programs, many programs offer “fragmented and incoherent courses,” and they also lack “in a clear, shared conception of teaching among faculty” (p. 391). The online Master’s program discussed in this paper faced the same issues. It did not provide students with critical knowledge that was reinforced throughout the program and that could be applied to their respective work situations and shared with their colleagues. As faculty, we were trained in specific subject areas; our dissertations and our continuous research provided us with expertise that we wanted to share with our students. However, we were not trained in providing students with an integrated curriculum that would lead them from introductory knowledge to in-depth knowledge, and that would ensure that the knowledge they acquired could be applied and could be shared beyond the classroom.

To address opportunities for collaboration among diverse stakeholders, I focus on how the concepts of knowledge exchange and knowledge communities encouraged faculty, students, and administrators in the newly revised online graduate program in Rhetoric, Writing, and Digital Media Studies at Northern Arizona University to create a curriculum that moves from individual course design to shared curriculum design. I draw from current discussions on communities of practice, agoras, and knowledge societies addressed by Lave and Wenger (1991), Wenger (1998a, 1998b), Drucker (1994, 2011), Echeverría (2010), Hughes, Jewson and Unwin (2013), Peter and Deimann (2013), and Rifkin (2014a, 2014b), and I expand on the notion that knowledge needs to move from being abstract and individual towards becoming a common good that is shared in order to benefit society. The curriculum redesign results are based on a mixed methods participatory research approach, with participants collaborating on course learning outcomes as well as course redesign. I conclude by arguing for continued assessment of current practices to encourage educators to think critically about their contributions to an open knowledge society.

Collaborative Commons, Knowledge Communities, and Knowledge Societies, Or: What Do We Know About Working Together Productively

Terms such as open access, open source, open education, and open research have been prominently featured in academic and public literature. Jeremy Rifkin (2014a), an economic and social theorist, told his readers that the “capitalist era is passing...not quickly, but inevitably. A new economic paradigm – the Collaborative Commons – is rising in its wake that will transform our way of life.” (p. 1) This paradigm shift, he continues, is possible because “economic paradigms are just human constructs, not natural phenomena.” (p. 2) Similarly, Peter Suber (2012) pointed out that open access has become a driving force in the academic publishing community because “any digital content can be put online without price or permission barriers” (p. 4). The Gates Foundation (2018) includes benefits for researchers, research, and society in their definition of open research, arguing that open research “reduces the barrier to collaborative research through data sharing, transparency and attribution” (Gates Foundation). Using this approach, information becomes available to users as part of a knowledge commons, increasing access to information that can be shared and used to create new knowledge by promoting discussion, interaction, and analysis on a local, national, and international level. However, academic institutions and publishing houses do not share a centralized structure for rewarding open and transparent research (Nosek et al., 2015). Additionally, Deimann (2014) in his critique on open education points out the oversimplification of the concept of transparency and equal access. Deimann uses Walsh’s (2011) research to point out that MIT’s open courses retain their exclusivity by not providing university credit to non-matriculated students. (p. 99) Deimann sees large MOOCs as a catalyst for “commercialization and commodification” (p. 105) that have led to continuous debates about “accreditation, certification and quality control” (p. 109), undermining definitions of “open” and encouraging academics and researchers to reconsider “claims of Open Education.” (p. 110) Similarly, Masterman (2016), in her study of Open Educational Resources (OER) at the University of Oxford, concludes that institutions’ initiatives rely on principles of governance. Institutions, she points out, need to encourage the integration of OER in the academic reward structure to support “open resources and open approaches to pedagogy” (p. 40).

The complex issues surrounding open educational practices and the sharing of knowledge are magnified by increased connectivity, or what Rifkin (2014b) calls a “formidable new technology infrastructure.” (Rifkin, 2014b) We can share knowledge in digital spaces, and we can create open access venues through Web 2.0 technologies. However, such access increases the complexity of OER even more since, as Rifkin points out, we need to learn “how to live together in an increasingly

interdependent, collaborative, global commons.” (Rifkin, 2014b) To make collaborative commons work, Rifkin emphasizes the importance of effective management strategies, including clearly defined boundaries, rules that are established by commons members, consequences for undermining the rules, and recognition of the commons by outside authorities (2014a, p. 162). In other words, without institutional support structures, effective ways of managing the distribution and adaptation of knowledge by the members of the community, and outreach to members outside the community, increased accessibility cannot be achieved.

Rifkin’s comments are a reminder that shared knowledge involves organizational structures that encourage the exchange of ideas, and that promote collaboration among its members. Such communities, also referred to as “communities of practice,” (Lave & Wenger, 1991; Wenger 1998a, 1998b) or “knowledge communities,” (Echeverría, 2010) legitimize and highlight the importance of forming relationships that can be sustained over periods of time and that can lead to new and otherwise elusive knowledge. Participation in communities of practice, explained in more detail by Wenger (1998a), “refers not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the practices of social communities and constructing identities in relation to these communities” (p. 4). Knowledge distribution and adaptation within communities of practice, then, rely on the willingness of its members to contribute and redistribute information that can be used and adapted by the larger group.

Javier Echeverría, in his 2010 article on “*Epistemopolis: From Knowledge Communities to Knowledge Cities*,” continues the discussion on knowledge communities and includes the concept of knowledge cities, arguing that knowledge communities promote “specific kinds of knowledge” (p. 24) but do not necessarily share this knowledge in the agora – the space that allows for public distribution of knowledge. Knowledge sharing, he points out, needs to be organized in an “epistemopolis,” or “knowledge city” where “different types of knowledge can be expressed freely and accessed by any citizen.” (p. 24) This implies that it isn’t simply enough to promote distinct knowledge communities; instead, it is necessary to provide “complex forms of association that develop on a foundation of a plurality of shared knowledge among different communities, and that maintain public spaces for the free exchange of knowledge.” (p. 23) This free exchange assumes that knowledge is not only consumed, but that it is produced, shared, assessed, and reconstituted by participants in the larger agora, leading from small communities to a larger knowledge society. This, according to the Gates Foundation (2018) and the UNESCO World Report (2005), is essential because otherwise, “knowledge societies will not really be worthy of the name unless the greatest possible number of individuals can become knowledge producers rather than mere consumers of already available knowledge.” (UNESCO, p. 189)

The principles of communities of practice and knowledge communities guided our attempts to revise the online Master’s program in Rhetoric, Writing, and Digital Media Studies. We realized that a strong and cohesive program relied on individual and local knowledge that could be shared and that could contribute to building a knowledge community. This knowledge community could then become part of a broader knowledge society that operates on the concept of the open *agora* where students contribute to and participate with communities outside their closely focused classroom and workplace communities.

Surveys, Interviews, and Collaboration: Learning from Stakeholders

Curriculum redesign at my institution takes place periodically, often seen as an imposition and undertaken to fulfill accreditation requirements. We performed a quick update and name change 15 years ago when we started to offer a master’s program in rhetoric, composition, and professional

writing fully online. At that time, the program encouraged students to choose any 36-hour combination of rhetoric, composition, and professional writing courses to satisfy degree requirements. We were closely aligned with similar degrees outlined by Stuart Brown, Rebecca Jackson and Theresa Enos (2000) where “the vast majority of programs require a course in the history of rhetoric, rhetorical theory (classical to modern), theories of composition, and the teaching of composition (or writing)” (p. 238).

We fulfilled all the requirements for a mainstream program in rhetoric; however, we realized that we had not taken the local context into consideration. Our teacher students were not happy with the professional writing courses, and professional writing students did not care about the classroom focus in our rhetoric and composition courses. We split the programs five years after going fully online, allowing for much flexibility and elective credits to accommodate everybody’s needs. The course offerings stayed the same, since we assumed that student dissatisfaction would stop once we divided the programs. We agreed to these changes not because we conducted actual surveys with our students or because we believed in a separation of the disciplines, but because we had heard informally from enough students that it seemed the best approach at the time for the student population we served.

Seven years later, faculty members in the rhetoric program embraced the much-needed in-depth curriculum revisions to address continued student feedback on offering courses that would be directly applicable to their current work situations. The following question guided our research and the revisions to the rhetoric program:

- What programmatic changes to the online M.A. rhetoric program are necessary to incorporate open learning principles and to promote student participation in knowledge societies?

The results of the small-scale investigation are based on a mixed methods participatory research approach. Surveys and interviews with former and current students, collaboration with assessment specialists, and open knowledge exchange with faculty participants provided the foundation for developing an open learning environment where students are encouraged to learn through collaboration to prepare them “for employment in a knowledge society” (Masterman, 2016, p. 34). To provide guidelines for discussions on course learning outcomes and course redesign, we followed Wenger’s stages of development in communities of practice:

Wenger’s model encouraged curriculum redesign stakeholders to come together and to discover common ground despite diverse approaches to teaching and learning, negotiate community and possible collaborations, engage with each other and create a new curriculum, and continuously communicate and seek advice on additional course revisions after the majority of the curriculum redesign was concluded (see Figure 1).

Open Knowledge Exchange to Improve Current Practices: Discussing the Challenge

Surveys and Interviews as Catalysts for Change

We conducted surveys with past and current students, we interviewed students and colleagues in rhetoric and writing studies, and we explored online graduate programs in the field. From our surveys, we learned that our student population for the graduate program in Rhetoric consists of 80% middle school, high school, and community college teachers who wanted to update their skills and move up within the institutional ranks or move to another educational institution. 15% of our students were in the process of changing their careers or were newly graduated bachelor’s students interested in going into the teaching profession, and 5 % were military personnel who were involved with teaching

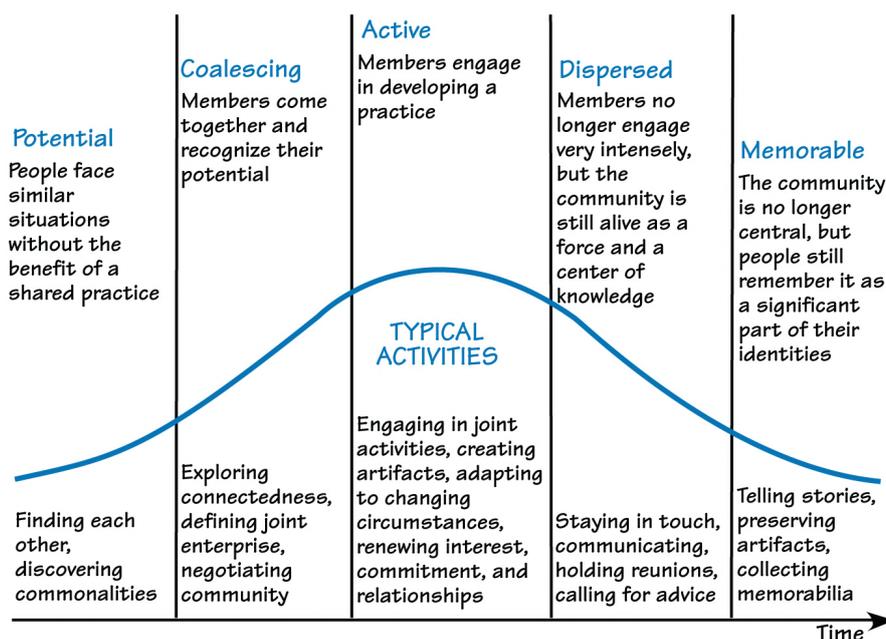


Figure 1: Wenger's (1998b) Stages of Development for Communities of Practice

writing at the base. Student ages ranged from 22–70, with the majority of students in their thirties to their fifties. For many of the students it was the first time back in the college classroom after a 10–30 year professional career, and the first time enrolled in an online program. Because students were not place-bound, they could enroll in the program from any location nationally or internationally. This meant that the needs of our approximately 100 enrolled students were diverse. Some of the teachers, for example, worked exclusively with underrepresented students while others were in a high-achieving school district. Some worked with ESL learners in the U.S. or abroad. Some worked in districts that had limited to no access to technology. All, however, wanted to serve their specific student populations better and wanted to learn how to do so by completing the master's program. In addition, close to 40 % were interested in continuing to a PhD program at some time in their lives.

In the follow-up interviews, we asked students what topics they would like to see in the program. They emphasized the importance of exposure to writing in other disciplines in addition to the more traditional course topics such as writing pedagogy/composition theory courses, rhetorical theory courses, and social media writing courses. Students wanted to use what they learned in their courses and apply it to their work situations, and they wanted to see a bridge between theory and practice. In addition, they wanted to be able to present at conferences in their school districts, locally, or on a national level. As one student pointed out, "The writing assignments I have most appreciated are ones that I could potentially present at a graduate conference or submit for publication in a journal." Student goals in our program were similar to the goals outlined by Miller Brueggemann, Blue and Shepherd's (1997) survey, especially highlighting professionalization and preparation for the job market (p. 394).

When we initially discussed the survey and interview results, we were pleased to see that many of the current students seemed satisfied with what we offered. If we focused on the overwhelming positive feedback we received, especially in terms of faculty commitment to student success and dedication to creating a positive online environment, we could ignore some of the problems that students pointed out to us. For example, we learned that our courses were "uneven" with some

faculty requiring few readings and few responses, and others focusing on more reading than students could critically analyze and discuss. We overemphasized some course topics and barely addressed others, including interdisciplinary writing in middle and high school settings. The assignments we asked our students to complete did not build on each other, and students, even though they took a capstone course, were unsure what the expectations were for their final work in the program. Many did not understand what it meant to apply theory to practice, and they muddled through their final work without applying the information and skills they acquired throughout the program.

Before we conducted the survey and interviews, we understood our roles in terms of providing excellent course content to our students. We kept current in our fields, updated our courses when necessary, and received good individual student comments. From conference presentations and readings in the field, we knew that what we taught was also taught in other rhetoric programs. Similar to the programs discussed in Peirce and Enos's (2006) article on graduate curricula in rhetoric and composition, our program focused on composition theory and history of rhetoric, with argumentation, basic writing, and literacy studies included in the mix. However, up until this point, we didn't engage with each other on course design although we would exchange information on what we did. The information from the survey and interviews were the beginning part of moving from individual efforts to a more sustainable open knowledge exchange. At first, we resisted sharing course-specific details with our colleagues. We thought that we could implement the necessary changes – new learning outcomes that we could all agree on – without going deeply into individual course design. We had the technical knowledge that allowed us to conduct the surveys and do research on other programs, but we hadn't yet come to an understanding of shared responsibilities and shared knowledge. Even though we wanted to agree that “knowledge is *nonrivalrous*,” (Suber, 2012, p. 46) we also wanted to protect our right to our own subject specializations, our course design, and our grading. Since our department does not encourage or promote classroom visits, we were largely unaware of each others' course design, operating on the principle of “*Lehrfreiheit*,” which, introduced in the 19th century from Germany, refers to “the right of the university professor to freedom of inquiry and to freedom of teaching, the right to study and to report on his findings in an atmosphere of consent.” (Rudolph, 1962, p. 412) This freedom, to us, was part of our professional persona, and giving up this freedom by sharing course design with our colleagues was—and still is—difficult to consent to.

Since our surveys and follow-up interviews showed that students were interested in course topics and assignments that would directly apply to their work situations, we realized that keeping a close watch on individual courses would not allow us to make the needed changes to the curriculum. Once we accepted that individual strengths could be improved through collaboration, we started to work as a “knowledge community,” moving from providing information and data to working together on interpreting and using the data to arrive at a more integrative program. This approach was closely aligned to Peter Drucker's (2011) argument that “only when a [person] applies the information to doing something does it become knowledge.” (p. 269) This led us to reconsider Suber's explanation of why knowledge should be openly accessible, even though it can be hard to let go of our individual course designs. As Suber (2012) pointed out, “we can share it without dividing it and consume it without diminishing it. My possession and use of some knowledge doesn't exclude your possession and use of the same knowledge.” (p. 46) We finally put into practice the theoretical principles of knowledge communities that we often discussed in our interactions with each other and that we addressed in some of our courses but that we never fully applied to our own group interactions. Similar to Lave and Wenger's (1991) communities of practice, we started to accept that we could arrive at common goals and common knowledge that exceeded and improved individual knowledge. With this, we learned to renegotiate individual goals in order to participate as members of a community engaged in creating shared goals for the program.

Curriculum Discussions and Implementation as Shared Knowledge

To create a supportive environment where knowledge could be openly shared and discussed, we established an organizational structure that was influenced by Rifkin's (2014a) discussion of management strategies for knowledge commons. We understood the need for clearly defined boundaries (p. 162) and established a focus on the graduate curriculum in rhetoric, with students and faculty from the rhetoric group discussing the specifics of the changes, and assessment specialists providing valuable feedback on how to create a sustainable and learner-centered curriculum. We worked towards common knowledge in a supportive and non-judgmental environment, and also followed Rifkin's (2014b, p. 162) argument that members of the group had equal input on what learning outcomes would be included in each course, what assignments in a specific course would provide the stepping stone for future coursework, what seminal readings should be included in the curriculum, and what courses needed pre-requisites. We agreed that courses, once we taught them, could be modified as long as the newly established learning outcomes were met, and as long as the changes didn't undermine the curriculum goals we established. In our discussions, we also agreed that specific reading requirements beyond initially agreed-upon seminal works in the field would be determined by the specific faculty members teaching the course. This provided academic freedom within a structure that took into account both student need for specific topics and faculty need for creating a syllabus that supported their strengths while also including agreed-upon course assignments and learning outcomes.

Because we established boundaries and rules, the often long-drawn-out process associated with serious curriculum revisions became a shared activity for students, assessment specialists, and rhetoric faculty. We used the information we collected from our students and from colleagues in the field, and we worked with assessment specialists who were an integral part in the revision process. With their support, we were able to take individual learning outcomes from our courses as a starting point for renegotiating and revising the overall program learning outcomes. During the process, we learned that none of the courses we previously taught focused on classroom to workplace writing, and none of the course requirements included exposure to applications projects – both areas of interest for our students. Instead of a simple “Can you do it?” we included workplace writing and project-based learning throughout the curriculum, making sure that students would receive introductory guidance and practice that could be applied in later coursework to successfully complete their capstone project—a course we designed to use concepts of open learning to engage students in 21st century knowledge communities.

Stakeholders' combined knowledge, and our willingness to share this knowledge within defined boundaries, allowed us to move towards a curriculum that benefitted from individual strengths in connection with a strong common goal for student success. Instead of taking a medley of individual courses, we now guide students through the program by providing them with introductory courses that will get them ready for special topics courses. Program learning outcomes are organized by topics, including theory and knowledge, analysis and critical thinking, and application. Once students have taken the required courses, we know that all learning outcomes are addressed through course readings, course activities, and writing assignments. We no longer need to wonder what our colleagues are teaching, and we can advise students with confidence when they ask about how a specific course will fit their program and their career goals.

Concluding and Continuing

Our work on the Rhetoric, Writing, and Digital Media Studies graduate curriculum was recognized by outside authorities—the Department of English, the College of Arts and Letters, and the Office

of Curriculum, Learning Design, and Academic Assessment—which was an important point for legitimizing the outcome of our efforts as a community. It is in line with Rifkin’s (2014a, p. 162) insistence on recognition of knowledge communities, arguing that work conducted within a knowledge group can only be carried on and sustained if it is seen as valuable by members outside the knowledge community. Wenger (1998b) also argues that “organizations can support communities of practice by recognizing the work of sustaining them; by giving members the time to participate in activities; and by creating an environment in which the value they bring is acknowledged” (Wenger, 1998b). Certainly, our work is not done. Similar to Yancey’s (2009) outlook on what comes next in the curriculum discussions at her school, we also ask: “Do we review program components annually and make incremental changes? Do we stage a retreat when the entire program is reviewed and changes are suggested? Do we do both? In each case, what data do we need? Who will be involved, and why?” (p. 11) Our attempts at revising the graduate curriculum by creating a collaborative and open knowledge community among rhetoric faculty members have encouraged us to start discussions of the undergraduate curriculum, using similar strategies to plan and carry out curriculum changes.

Even though we know that our open knowledge community is limited by space and time, and is focused on exchanges of research information and curriculum design, we can create an openly accessible knowledge base that promotes student learning and success and also encourages continuous interactions about teaching strategies and about research interests. Because we were able to define knowledge as “nonrivalrous,” (Suber, 2012) it helped us increase faculty collaboration on curriculum design. Thus, we no longer discuss “my” and “your” course, but we focus on “our” curriculum and “our” learning outcomes while honoring faculty input and choices, and we continuously discuss how we can improve student experiences in our program. Similar to the findings explored by Sharla Berry (2017) on instructor practices for building community in online doctoral programs, we have learned that we need to welcome students, provide supportive feedback, create a positive learning experience, and engage our students in the learning experience. To accomplish this, we need to continue showing the importance of functioning communities of practice that encourages students to become knowledge workers in an ever-expanding knowledge society.

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