

Designing Online Curriculum: Program Revisions and Knowledge Exchange

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Abstract

The article focuses on the importance of knowledge exchange and knowledge communities to create an online curriculum that moves from individual course design to shared curriculum design. It draws 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. It shows the results of a program redesign achieved through collaboration on online course learning outcomes as well as course design, and it concludes 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, assessment practices.

Introduction

Faculty share knowledge—formally and informally—on an ongoing basis. Many talk in hallways, in offices, and at department meetings. They publish articles on subject-specific issues. They go to conferences and discuss new developments in their fields of expertise. They are happy to receive feedback that will push their research in a new direction. However, when it comes to course re-design and curriculum revisions, faculty often consider requests for changes to an established syllabus as threatening teacher 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 Darling-Hammond and Hammerness (2005) pointed 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, they were trained in specific subject areas; their dissertations and their continuous research provided them with expertise that they wanted to share with their students. However, they 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, this article focuses 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. The research used to contextualize this study focuses on communities of practice, agoras, and knowledge societies addressed by Lave and Wenger (1991), Wenger (1998a, 1998b), Drucker (1994, 2017), Echeverría (2010), Hughes and Unwin (2013), Peter and Deimann (2013), Rifkin (2014, 2014 March 15), and Masterman (2016). The article expands 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. The results show the need for continued assessment of current practices to encourage educators to think critically about their contributions to an open knowledge society.

Background on What Faculty Know About Working Together

Terms such as open access, open source, open education, and open research have been prominently featured in academic and public literature. Rifkin (2014), 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, 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) included 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 pointed out the oversimplification of the concept of transparency and equal access. Deiman used 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). Deiman saw 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, concluded that institutions’ initiatives rely on principles of governance. Institutions, she pointed 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 (2014, March 15) called a “formidable

new technology infrastructure.” 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 (2014, March 15) pointed out, it is important to learn “how to live together in an increasingly interdependent, collaborative, global commons.” To make collaborative commons work, Rifkin (2014) emphasized 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 (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 and Wenger, 1991; Wenger 1998 a, 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*,” continued 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 pointed 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 is not 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 the attempts to revise the online Master’s program in Rhetoric, Writing, and Digital Media Studies. Faculty 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.

Curriculum Redesign for Online Learning

Methods: A Case Study Approach to Learn from Stakeholders

Curriculum redesign for the rhetoric program takes place periodically, often seen as an imposition and undertaken to fulfill accreditation requirements. The Rhetoric, Writing, and Digital Media Studies (RWDMS) program performed a quick update and name change 15 years ago when the master's program in rhetoric, composition, and professional writing went 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. The program was closely aligned with similar degrees outlined by Brown, Jackson, and 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).

The RWDMS program fulfilled all the requirements for a mainstream program in rhetoric; however, faculty members realized that they had not taken the local context into consideration. Teacher-students in the program 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. One over-arching program was split into two separate 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 faculty assumed that student dissatisfaction would stop once the programs were divided. Faculty agreed to these changes not because they conducted actual surveys with students or because they believed in a separation of

the disciplines, but because they had heard informally from enough students that it seemed the best approach at the time for the student population they 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 research question guided the 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, faculty followed Wenger’s (1998a) stages of development in communities of practice which include the potential for communities of practice, a period of coalescing, an active time when members engage in developing a practice, a dispersal of members, and a final stage where members of the community remember the activities but are no longer engaged.

Wenger’s (1998a) 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.

Results: Open Knowledge Exchange to Improve Current Practices

Research included surveys with past and current students, interviews with students and colleagues in rhetoric and writing studies, and an exploration of online graduate programs in the field. The surveys (n=73) revealed that the 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 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 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.

The survey asked students what topics they would like to see in the program. Most 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, with no student discouraging such course offerings.

Table 1. Student Recommendations for Course Offerings

Course Topic	Strongly Recommend %	Recommend %	Neutral %	Discourage %
Rhetorical Theory Course	47	32	21	0
Writing Pedagogy/Composition Courses	65	32	3	0
Social Media Courses	38	36	26	0
Writing in Different Disciplines	39	47	14	0

Based on information from follow-up interviews (n=15), 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. Student goals in the RWDMS 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 or job advancement (p. 394).

Table 2. Student Program Expectations

Area of Interest	Examples of Student Feedback
Theory to practice	Theory and research is what I need, and how it connects to pedagogical considerations as related to reading, writing, The courses that I like best focus on how theory leads to practice. I want to work on the practice part, but need the theory to get me there.

Career advancement	<p>Courses related to my line of work, teaching English in public high school, and how to move ahead in my job, are my main motivation for the master's program.</p> <p>I don't know much about how to teach college writing and that's what I want to do. A course on writing pedagogy for college students would be great.</p>
Academic preparation	<p>The writing I would most appreciate are ones that I can potentially present at a graduate conference or submit for publication in a journal.</p> <p>I'd like guidance about how and where to publish academic work I completed for the program.</p>
Writing for different purposes	<p>I want to learn more about different online writing formats and how to communicate with an online audience.</p> <p>I am especially interested in writing assignments that add to my skill level. For example, I know how to write a student essay, but not how to write a proposal for a grant I need to write to get laptops for my high school students.</p>
Project-based learning	<p>I'd like to see application courses. I really enjoy digging deeper into theory and looking at where it exists in our world, but I want to see opportunities to apply these theories and put them to use immediately.</p> <p>It would be nice to take courses that help me practice how to put together a unit for my middle school students. A specific course designed to help teachers with project ideas that prepare high school students with important writing skills for college or career would be nice.</p>

When faculty initially discussed the survey and interview results, they were pleased to see that many of the current students seemed satisfied with what faculty members offered. If they

focused on the overwhelming positive feedback they received, especially in terms of faculty commitment to student success and dedication to creating a positive online environment, they could ignore some of the problems that students pointed out to them. For example, faculty learned that their 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. Faculty overemphasized some course topics and barely addressed others, including interdisciplinary writing in middle and high school settings. The assignments they asked their 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 the survey and interviews were conducted, faculty understood their roles in terms of providing excellent course content to their students. They kept current in their fields, updated their courses when necessary, and received good individual student comments. From conference presentations and readings in the field, faculty knew that what they 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, the rhetoric 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, faculty didn’t engage with each other on course design although they would exchange information on what they 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, faculty resisted sharing course-specific details with our colleagues. They thought that they could implement the necessary changes – new learning

outcomes that faculty members could all agree on – without going deeply into individual course design. Faculty had the technical knowledge that allowed us to conduct the surveys and do research on other programs, but they hadn't yet come to an understanding of shared responsibilities and shared knowledge. Even though they wanted to agree that “knowledge is *nonrivalrous*” (Suber, 2012, p. 46), they also wanted to protect their right to their own subject specializations, their course design, and their grading. Since the department does not encourage or promote classroom visits, faculty 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 the rhetoric faculty, was part of their professional persona, and giving up this freedom by sharing course design with their colleagues was—and still is—difficult to consent to.

Since the surveys and follow-up interviews showed that students were interested in course topics and assignments that would directly apply to their work situations, faculty realized that keeping a close watch on individual courses would not allow us to make the needed changes to the curriculum. Once they accepted that individual strengths could be improved through collaboration, they 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 Drucker's (2017) argument that “only when a [person] applies the information to doing something does it become knowledge” (p. 269). This led to a reconsideration of Suber's explanation of why knowledge should be openly accessible, even though it can be hard to let go of 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). Faculty finally put into practice the theoretical principles of knowledge communities that they often discussed in their interactions with each other and that they addressed in some of their courses but that they never fully applied to their own group interactions. Similar to Lave and Wenger’s (1991) communities of practice, faculty started to accept that they could arrive at common goals and common knowledge that exceeded and improved individual knowledge. With this, they learned to renegotiate individual goals in order to participate as members of a community engaged in creating shared goals for the program.

Discussion: Curriculum Discussions and Implementation as Shared Knowledge

To create a supportive environment where knowledge could be openly shared and discussed, faculty established an organizational structure that was influenced by Rifkin’s (2014a) discussion of management strategies for knowledge commons. They 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. Faculty worked towards common knowledge in a supportive and non-judgmental environment, and also followed Rifkin’s (2014, March 15) 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. They agreed that courses, once they 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 that faculty established. In their discussions, they 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 faculty 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. They used the information they collected from their students and from colleagues in the field, and they worked with assessment specialists who were an integral part in the revision process. With support from other faculty members in the rhetoric program, each individual faculty was able to take learning outcomes from their courses as a starting point for renegotiating and revising the overall program learning outcomes. During the process, they learned that none of the courses they previously taught focused on classroom to workplace writing, and none of the course requirements included exposure to applications projects – both areas of interest for their students. Instead of a simple “Can you do it?”, they 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 that faculty designed to use concepts of open learning to engage students in 21st century knowledge communities.

Stakeholders’ combined knowledge, and faculty’s willingness to share this knowledge within defined boundaries, allowed them 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, faculty 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, faculty know that all learning outcomes are addressed through course readings, course activities, and writing assignments. They no longer need to wonder what their colleagues are teaching, and faculty can advise students with confidence when they ask about how a specific course will fit their program and their career goals.

CONCLUDING AND CONTINUING

The 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 faculty’s community efforts. It is in line with Rifkin’s (2014) 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 (p. 162). Wenger (1998b) also argued 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.” Certainly, the work of the rhetoric faculty is not done. Similar to Yancey’s (2009) outlook on what comes next in the curriculum discussions at her school, faculty in the rhetoric program 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).

Their attempts at revising the graduate curriculum by creating a collaborative and open knowledge community among rhetoric faculty members have encouraged them to start discussions of the undergraduate curriculum, using similar strategies to plan and carry out curriculum changes.

Even though rhetoric faculty know that their open knowledge community is limited by space and time, and is focused on exchanges of research information and curriculum design, they 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 they were able to define knowledge as “nonrivalrous” (Suber, 2012), it helped them increase faculty collaboration on curriculum design. Thus, faculty no longer discuss “my” and “your” course, but they focus on “our” curriculum and “our” learning outcomes while honoring faculty input and choices, and they continuously discuss how they can improve student experiences in the rhetoric program. Similar to the findings explored by Berry (2017) on instructor practices for building community in online doctoral programs, faculty have learned that they need to welcome students, provide supportive feedback, create a positive learning experience, and engage their students in the learning experience. To accomplish this, faculty need to continue showing the importance of functioning communities of practice that encourages students to become knowledge workers in an ever-expanding knowledge society. In addition, future research will need to look at cross-case analysis in collaboration with other similar institutions to show the impact of communities of practice on similar programs across the nation.

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