

Postdoctoral Pedagogy

Lauren Coats and Elliott Shore

Every summer since 2004, recently minted PhDs have gathered at Bryn Mawr College for a seminar that inaugurates their CLIR postdoctoral fellowship. Held in classrooms recently modernized—spaces that serve as linchpins of ivy-walled histories to techno-chrome futures—the seminar proposes that participants too might help forge connections between the past and future of higher education. This connection is not merely aesthetic. The CLIR Fellows Program was born of the conviction that by introducing some of the finest young minds of the current generation into our libraries, they could become a force for change. The seminar has been an instrumental piece of this vision, a shared and founding experience that has produced a collegium of fellows attuned to the same problems and uniquely positioned to address them.

The seminar's content responds directly to the issues that inspired the program's foundation. The creators of the program had agreed that academic libraries were facing a crisis: opportunities to develop leadership were inadequate for bringing library organizations and collections into the emerging digital environment for higher education. At the turn of the twenty-first century, the information revolution had engendered what would prove a perverse effect: many had expected that the advent of digital technology would reduce the need for traditional research and teaching knowledge. In this new world, they believed that a technically savvy leadership would be adequate to manage the transition that blended ivy-lined quads with the virtual campus. The opposite proved true: the digital transformation of higher education created a demand for deeper skills development and broadly informed leadership, leadership that

The authors would like to thank the following colleagues for reading and improving this essay: Alison Cook-Sather, Chuck Henry, and Christa Williford.

required experience with traditional values and inherited methods of research and teaching in combination with a refined understanding of the implications and disruptive potential of the second machine age (Brynjolfsson and McAfee 2014).

As scholar and higher education innovator Cathy Davidson notes:

Almost all the institutional apparatus that now governs our forms and norms of higher education were developed in the period from 1870 to 1925, the height of the Fordist industrial age. . . . Quite precisely, the late nineteenth-century research university was structured around the affordances of the last information age, when steam-powered presses and machine-produced paper and ink made print abundantly available to the masses for the first time in history and the new technologies of electricity and telegraphy were extending the reach of mass, top-down broadcast media through film and radio (2014, 6–7).

The future, the program's founders agreed, would flourish only with a judicious melding of past practice and thoughtful, imaginative application of new tools and resources. The challenge went well beyond technology: the inherited cultural and behavioral customs of higher education needed to be re-examined in order to manage more efficiently our evolution into the twenty-first century. A variety of interested stakeholders convened in Sarasota, Florida, in 2003 to negotiate one response to this challenge: the CLIR Postdoctoral Fellowship Program. Leaders from the academy, from the funding community, and from libraries and their associations gathered at the invitation of Deanna Marcum, then president of CLIR.¹ To move institutions of higher learning out of the affordances of the last information age, it was agreed that the CLIR fellowships would focus on the structure and organization of, and access to, information in the twenty-first century. Yet the group collectively acknowledged that the most critical components of such an effort would be the people; it was imperative to gather together the most talented minds steeped in the traditions, the languages, the research methods, and the critical thinking skills of academic scholarship and inquiry. Who is more thoroughly steeped in these than recent graduates of PhD programs? By catalyzing change in the ways that academic librarians conceive of traditional workplace boundaries, recently minted PhDs could embrace new information technologies while holding close the ideals of the academy, the library, and most especially those of advancing scholarship and learning.

Implicit in this framing of the program's development is the centrality of education to the fellowship program, in terms of providing fellows (and the institutions they join) with a new perspective on the inherited values, methods, and customs of higher education, as well

1 Those present at the Sarasota meeting were Chuck Phelps, Francis Blouin, Jerry Campbell, Rick Detweiler, Paula Kaufman, Suzanne Lodato, Richard Lucier, Deanna Marcum, Susan Nutter, Elliott Shore, Winston Tabb, Karin Trainer, and Karin Wittenborg.

as a space to imagine alternatives. When CLIR and its partners began to develop the parameters of the fellowship in 2003, Elliott Shore, then chief information officer, director of libraries, and professor of history at Bryn Mawr College, posed the question of the program's pedagogical orientation: How would CLIR foster in the groups of fellows the kinds of understanding they would need to take on the challenges that were already so daunting to the library community? The discussion that ensued confirmed that education should become an explicit part of the program. With a directive to develop a pedagogical component to the fellowship, the work of defining the fellowship's educational program had begun.

The summer seminar emerged as the program's central education component. As co-leaders of the seminar since 2008 (the first year that Lauren taught the seminar; Elliott has been teaching it since its inception in 2004), we have worked to develop a pedagogical experience that lays a foundation for the learning that continues throughout the fellowship. As tokened by its name, the seminar is in many ways traditional: walk into the classroom on any given day of the seminar, and you will find activities that you might expect to find in any graduate course, whether a guest lecture or a reading discussion or a collaborative research project. But in significant ways, the seminar is unlike a traditional course, and its formation reflects our response to four guiding questions that challenged us to re-think how we teach, and how a classroom functions. What exactly is the subject matter of the seminar? How do we "teach" such a class, in which the "students" are already deep experts in their subject areas, veterans of their respective college and university programs, and, often, seasoned teachers in their own right? How could the work of the seminar be made integral to the duration of the fellowships? And, how could we help the fellows enter the specific culture of the academic library, to respect its traditions and strengths while also being a force for change within that institution?

The answer to the first question is deceptively clear. The CLIR postdoctoral fellowship focuses on the creation, organization, and distribution of new forms and scales of information: terabytes of born-digital data from lab equipment, or the large-scale digitization of manuscripts, printed pages, and other analog information that make them widely accessible and computationally query-able. In the broadest sense, this focus gives the seminar its subject. Yet as the discussion above suggests, the issues that the fellowship addresses involve fostering leadership and changing embedded cultural habits. In other words, we build our pedagogy on the proposition that working with information today is not simply a matter of acquiring more information. So, for example, while we invite guest speakers who are at the cutting edge of data curation, digital humanities, and new information technologies and strategies, these guests model ways of inhabiting and navigating institutions as much as they dispense specific knowledge about their areas of expertise. We identify the seminar's subject more properly as exploring the kinds of roles and relationships that the fellows must have to lead others in new

forms of knowledge construction and navigation. We maintain that the human infrastructure of institutions is as important to information management as the technologies in use. Moreover, the people at the heart of the program—the fellows themselves—are already highly qualified, well trained, and passionate about the work they do in the academy. This recognition identified, for us, two of our three pedagogical goals: first, creating a cohort of fellows who can work together, relying on each other's expertise and shared mission even when geographically dispersed; and second, focusing on the roles that the fellows can occupy rather than just on specific skills or subject expertise.

Our third pedagogical goal developed from the question of how to prepare recent PhD recipients to work in libraries. The fellows are tasked in their fellowship with helping to think through how scholarly information should exist in the twenty-first century college and university. But merely having “access to technology does not guarantee access to knowledge” (Balsamo et al. 2013, 6), and the fellows must consider not just the tools, machines, and bytes, but also the kinds of knowledge construction—including the kinds of knowledge workers—that such systems support. One form of knowledge construction to which the program responds is the narrowness of U.S. doctoral education. It fosters the development of deep, but not wide, knowledge; it educates extraordinarily talented groups of people to know the most about the thinnest slice of the human experience, to come out of graduate programs with the surest sense of their fields. But they do not learn much about the context in which they have spent their years in the university. The emphasis is almost exclusively on inherited forms of research, writing, and teaching. This myopic focus has been changing in recent years, as more graduate programs include attention to the conditions of graduate education as well as to new forms of scholarship and scholarly communication. The CLIR Postdoctoral Fellowship Program and seminar have from their inception centered on these issues. More particularly, we asked ourselves how we might design the educational experience to forge new connections between the structure and function of the library and doctoral training. How could the deep subject expertise and rigorous research methods that the fellows have already learned be married to the library's strengths in knowledge organization, retrieval, preservation, and production? The answer was not to replace one narrow kind of training (doctoral training) with another (library training), but instead to work with these brilliant young scholars to recognize their doctoral programs and the library as features of a much larger institutional matrix. Thus emerged our third pedagogical goal: a focus on orienting fellows to the landscape of higher education.

The three pedagogical goals merge in the summer seminar, in which we invite all participants—the fellows and the guests—into a set of conversations about the state of higher education, the research library, and twenty-first century information. The seminar kicks off the several pedagogical components of the Postdoctoral Fellowship Program, each of which supports the participatory, collaborative,

and open-ended embrace of the possibility of inhabiting well-established structures (the university itself) in new ways. The components include: the intense, in-person summer seminar that inaugurates the fellowship and that is the focus of this essay; monthly, online “synchronous sessions” for all current fellows in which we discuss topics selected by them; informal chats through the fellowship website; and two additional, shorter, in-person seminars held in the winter of the fellows’ first and second years. In some ways, the seminar’s pedagogy is nothing new: it evolved by linking the means and modes of education to its purposes. The Postdoctoral Fellowship Program’s curriculum reflects the issues, and at times the methods, of new pedagogical models—from massive open online courses (MOOCs) and flipped classrooms to badges to maker culture and more. What the CLIR seminar has in common with such models a sense of the transformative possibility of higher education in the digital age, and the need for such transformation on the level of the learning experience, of the moment when people turn information into knowledge.

We set out in the pedagogy of this seminar to provide context, to find a common language, to learn from one another and learn to rely on one another. We have developed content modules that ground our project of re-orienting ourselves within the academy: we have discussed how to decode various parts of academic culture and participate in effective communication inside a bureaucracy. We have thought through together how to read the professional literature of librarianship, on one end of the spectrum, and, on the other, to think in terms of data, the conceptual unit of twenty-first century information, within and across disciplines. We have established traditions, such as reading some of the same texts,² and inviting the fellows from earlier cohorts to help prepare the newer cohorts. We have questioned the structures of academic information that underpin knowledge making in the academy through the lens forged by a distinguished group of guests, some of whom have been with us year after year, in dialogue with each year’s new cohort of fellows. We have tried to inspire the desire to change these structures. We have sought answers together, valuing the ideas of the group as developed through the intelligence of the individual. Mikhail Bakhtin argues that tone, particularly laughter, is central to producing an analytical revision that makes the familiar strange. We have encouraged a laughter that “has the remarkable power of making an object come up close . . . where one can . . . doubt it, take it apart, dismember it, lay it bare and expose it, examine it freely and experiment with it.” We have worked to create an intimate, critical space where, with a shared joy in knowledge making, we “clear the ground for an absolutely free investigation” of a world we thought we knew so well, that of the academy (Bakhtin 1981, 23).

2 A common reading has been Battles 2003, *Library: An Unquiet History*.

Building a Cohort

We meet in classrooms at the opening seminar at Bryn Mawr College, but the classroom as traditionally conceived is perhaps the least representative space of the seminar. Even if “flipped” or team-taught, the grounding assumption of the traditional classroom is that expertise resides in the “teacher of record,” a term of educational bureaucracy that captures well the sense that only certain individuals have the requisite authority and expertise to fill in perceived knowledge gaps. The staffing and syllabus of the CLIR seminar challenges this model. It focuses on the value of using partnerships to explore pedagogical practice as described by scholars of academic development, including Mick Healey and Alison Cook-Sather.³ The key notion we draw from this work is that teachers and learners can contribute in equal but different ways to the classroom, to teaching and learning through various forms of collaborative exploration and planning. Thus, even the teaching of the seminar is collaborative: rather than just one or two people holding all the knowledge and dispensing it, the seminar includes a wide range of voices and positions and perspectives to underscore that the work we are undertaking requires more than one body and one mind to succeed. Since the program began, there have been four co-leaders of the seminar: Elliott Shore (2004–2015), Christa Williford (2005 and 2006), Danielle Culpepper (2007), and Lauren Coats (2008–2015). Beyond these “teachers of record,” the collaborative teaching model involves bringing in many guest speakers and the fellows’ supervisors, as well as the fellows themselves. In other words, everyone who participates in the seminar does so as both student and teacher. Rather than conceiving of a knowledge gap that needs to be filled (a passive Fordist model), the seminar’s teaching suggests a collaborative approach to co-creating the pedagogical outcomes.

On a small scale, we introduce activities into the syllabus that foster collaborative problem solving. For instance, we have asked fellows on the seminar’s first day to form small groups and, in the space of just an hour or so, research an issue confronting academic libraries and propose an approach to it. This case study method asks them to become, in the context of the seminar, the authorities on a particular issue. (Topics have included best practices for data publication, the fate of the reference desk, collection development policies for born-digital materials, and the relationship between digital humanities centers and the library.) The fellows are thus introduced to some key topics in academic librarianship, and most importantly, they have the opportunity to think with their cohort about how to address them.

On the seminar’s last day, a follow-up exercise has the fellows propose group projects that they could work on throughout their fellowship. After having known each other for a matter of days, the fellows articulate a problem that is central to their fellowships (and thus to the libraries in which they will work) and develop ways to

3 See Healy, Flint and Harrington 2014, and Cook-Sather, Bovill, and Felten 2014.

address it that call upon their shared expertise. Although the exercise is precisely that—an exercise—we have found the results impressive. Over the ten years of the program, CLIR has built in additional support to enable fellows to develop real projects beyond the seminar's close (often ones whose conception is seeded at the seminar), to activate their cohort to build the library of their future beyond the local limits of their particular institution. One example is the foundation of *Archive Journal*, a project born out of a seminar conversation among fellows and Donald Waters of The Andrew W. Mellon Foundation. Lauren Coats proposed the original idea for the journal, Mellon and CLIR supported it, and collaborations with many colleagues including fellows helped make it a reality. The writing project of which this essay is a part, to give another example, models a form of active, collaborative knowledge making by program participants. The program has also moved to include microgrants for collaborative projects by fellows as a way to structurally encourage the cohort-based collaborations that begin in the Bryn Mawr seminar.⁴

This collaboration depends on creating a community among the participants, most particularly among the fellows themselves. The days shared at Bryn Mawr College help cement this community. The fellows spend an intensive amount of time in close proximity, sharing classroom space, living in shared quarters, eating together, and thinking together. Time outside of the classroom is integral to the seminar's success, such as an annual dinner at Elliott Shore's home that has become a cherished part of the seminar. The in-person aspect forges connections that last beyond the bounds of the seminar. The focus on cohort builds upon the [LEEP Program at the University of Illinois](#).⁵ This first of the online programs in library education from the late 1990s used the power of linked information technologies to create annual cohorts of graduate students by having them meet all together in the summer before they began their formal course work, then put them in classes that met synchronously every week or two, then finally and perhaps most importantly, brought the group face to face again in the middle of each semester for a long weekend of intense teaching and learning. All of these practices found their way into the Postdoctoral Fellowship Program: the main pedagogical experience that is the opening summer seminar; the monthly synchronous sessions throughout the year; and the second, brief, in-person meeting held several months after they first gather in Bryn Mawr College. The synchronous sessions have played an important role in keeping the cohorts together between face-to-face meetings. These sessions include check-ins on how things are proceeding at

4 For more on the microgrants and the projects they have seeded, see the contribution by Tamsyn Rose-Steel et al. in this collection.

5 The syllabus for the first cohort, which has slowly changed over the course of the past decade, was developed by the associate dean for academic programs at the University of Illinois Graduate School of Library and Information Science (GSLIS), Linda Smith, in consultation with Elliott Shore. The technologies that connected the cohort in between our face-to-face sessions were developed by Vince Patone, formerly director of LEEP's instructional technology and an inspired teacher himself, who never asked his faculty what technologies they wanted to use, but asked them how they liked to teach.

each institution, as well as conversations with expert guests chosen and led by fellows. As a coordinated whole, the seminar and other educational components work to build the fellows' community as a resource in itself.

Orientation to the Higher Education Landscape

The seminar's pedagogy embraces teaching and learning grounded in the understanding that knowledge is co-created; that teaching, learning, and research are intricately interwoven; that digital technologies are powerful largely because they connect people and ideas with one another; and that a university is most powerful when all of its constituent parts work together in a collaboration based on mutual respect rather than hierarchy. It is this last point that has become the second goal of the seminar: to orient fellows to the conditions of possibility of the university and the fellowship. What synergies exist between bureaucratically separated parts of the institution that could use the assistance of a postdoctoral fellow who can move easily between and among settled organizational forms? To see such synergies requires the ability to see the institution more broadly. Although doctoral training provides deep subject knowledge, it does not (usually) involve a critical examination of the structures that enable knowledge construction. Borrowing from the insights of critical university studies, part of the fellows' seminar is devoted to a large-scale discussion of how the university and the library work. The discussion provides an institutional context for the smaller scale decisions within libraries, organizations, and programs about how to create, organize, and distribute scholarly information. This is a matter of orientation rather than mastery; it is not expected that over the course of the short summer seminar fellows will master a finite checklist about the institutional system of libraries and higher education, or even of information resources specifically. Rather, the focus is on introducing fellows to some of the ways in which institutions are "mobilizing networks" that "aggregate, coordinate, disperse, balance, and adjudicate complex flows of resources" (Davidson and Goldberg 2010, 129). To redirect these networks, then, requires a practical understanding of how higher education institutions and the library function.

To develop this understanding, seminar participants read about the history of libraries, discuss university budgets, and begin to learn the lexicon of academic librarianship. On what has become the signature day of the seminar, fellows' supervisors and major funders (Donald Waters of The Andrew W. Mellon Foundation and Joshua Greenberg of the Alfred P. Sloan Foundation have been frequent guests) join the seminar to discuss what needs to change in higher education. And—perhaps most important—throughout the seminar the fellows talk with each other across their diverse disciplinary and training backgrounds to identify commonalities. It is here that one

sees most clearly how the individual perspectives of the seminar leaders and participants create a rich and varied sense of the landscape of higher education. At the beginning of the program in 2004, almost all of the fellows came from the humanities and the qualitative social sciences. In the past few years, however, the program has grown to include quantitative social scientists and natural scientists. Glimpses of the kinds of exchanges that take place in the seminar offer some sense of how participants become oriented to, and begin to consider altering, the higher education landscape.

One of the most remarkable moments in a recent seminar involved a question asked by one of the humanists in the group, late in the first week of the Bryn Mawr College experience. She asked to be reminded who in the room was a natural scientist, social scientist, or humanist; the disciplinary differences that are usually taken to be so evident and integral were, we found, not necessarily so when discussing the structures of scholarly information. The commonalities as well as the differences among us enriched our learning as the cohort developed into a cohesive and variegated community. A fellow with a natural science background objected to a very loose, metaphorical use of the term “ecosystem” by the humanists in the room, and we engaged in a deeply thoughtful conversation about who owns which words and how meaning can shift. A computer scientist/philosopher/dean of a library and information science program enthralled a recent cohort with his intensely focused presentation of the intricacies of linked data and the ways in which our choices in this realm are crucial to the future of scholarly inquiry regardless of disciplinary orientation. Funders share with the fellows their interest in supporting ideas with the potential to change a field, emphasizing the importance of a broad impact for local, subject-based, or disciplinary projects. The supervisors and the fellows together engage each year in a tightly organized workshop that shows how the norms particular to each participant’s place in the university shape expectations and hopes for the fellowship.⁶ Discussing these norms not only leads to concrete suggestions for confronting the inevitable bumps that occur along the way, but also provides insight into the distinct cultural practices of different groups within the academy and ways in which they might productively articulate.

Focus on Roles

Although institutions are necessarily conservative insofar as they “validate and impose norms, practices, and beliefs, seeking to ensure orderly interchange through normative interactions” (Davidson

6 The key change of inviting the supervisors of the fellows to share in the experience came from Marta Brunner, now director of the library at Skidmore College, who was a CLIR postdoctoral fellow of the third cohort in 2006. She not only suggested this change, but became a regular participant in that part of the seminar for a number of years. Brunner’s impact on the seminar exemplifies the ways in which the seminar has been shaped by fellows’ input, an example of our pedagogical philosophy that emphasizes the co-creation of the seminar experience and outcomes. Each year, fellows provide feedback on the seminar, which we use to refine the experience.

and Goldberg 2010, 129), they also have potential for change and innovation. The goal of orienting fellows to higher education as a mobilizing network thus also requires situating the fellows themselves within this network, each well positioned and well equipped to make change. In the seminar, we work together to explore the possibilities and limitations of their positions as postdoctoral fellows. The groundbreaking work of Alison Cook-Sather informed from the very beginning the ways in which we engaged in this exploration. Discussion of one of her texts, “Unrolling Roles in Techno-Pedagogy: Toward New Forms of Collaboration in Traditional College Settings” (2001), was a pivotal moment for cohorts in the early years of the seminar. This article, based on a three-year project in which teams of faculty, librarians, students, and information technology (IT) professionals met to discuss how to incorporate technology into undergraduate teaching and learning, was crucial in helping the early cohorts to imagine themselves in the liminal space that they would inhabit. Cook-Sather explains: “Cast in a particular position, members of an academic community enact what they understand to be their prescribed parts,” yet these roles can be “unrolled” to challenge the “traditionally prescribed parameters of participation in educational theory and practice” (2001, 4, 6). This perspective illuminates the ways in which the fellows navigate various roles that they can inhabit—of librarian, of PhD-certified subject expert, of teacher, of outsider, of insider. Although all involved in the program recognize that liminal space has its limitations, the fellowship program is predicated on taking advantage of this “in-betweenness,” the experiential opportunity to see how these various roles do or could support one another.

The focus on roles, principles, and methods stands in contrast to a pedagogy that emphasizes finite skills or resources. The place of skill building has long been a concern in putting together the educational experience for the fellows. We recognize that, to do the work of their fellowships and beyond, the fellows need particular skills.⁷ And yet, for the fellows group—which every year has increased in number and diversity—there has been a marked absence of any single set of skills that every fellow needs. Fellows’ jobs and their professional preparation are sufficiently varied that there is no one skill—how to conduct a data interview with a researcher, how to do text analysis with R, how to implement an institutional repository—that applies to all fellows. Because of the diversity of fellows’ needs, the seminar has developed as a form of nonvocational preparation. In this spirit, the seminar focuses less on a particular skill set than

7 And we recognize that some of the skills they will need are not part of graduate education as currently instantiated. This situation stems in part from the narrowness of doctoral education as well as from its tendency to replicate norms of earlier eras. It also comes from the simple fact that the fellows are being asked to do new kinds of work, following career paths that fall outside the training of most doctoral recipients. On the former point, see Bethany Nowviskie’s call to reformulate graduate training for “21st-century humanities” by introducing graduate students to “research skills, corpora, and trends” that reflect new technologies and possibilities (Nowviskie 2011). On the latter point, see Meredith Beck Sayre et al., “Toward a Trackless Future,” in this collection.

on the structural position of the fellow. As part of the fellowship, fellows are encouraged to identify the ways in which they can define their own roles, which in turn requires them to determine what they will need to learn as part of their fellowship. We often end the seminar by having fellows plan, formally or informally, how they will continue their education over the course of the fellowship. We ask them how they will use the monthly synchronous sessions (e.g., what guests they would like to have, what topics they would like to discuss), as well as the CLIR resources and community to customize their own education. Several fellows, those in data curation fellowships funded by the Mellon and Sloan foundations, receive stipends dedicated to individual training and professional development. For all fellows, the program's educational component is intended to give them the specific tools they need to leverage their structural positions at just the right time. Cook-Sather's emphasis on the issues of labor and role rather than a naïve techno-determinism has been key to developing our pedagogy. She writes about the necessity of redefining the roles of individuals within higher education in order to build more intentional relationships among these differently positioned players, to share responsibilities for the educational project, and thus to enable productive collaboration (Cook-Sather 2001, 5). The summer seminar then becomes an opening orientation to a cohort experience in which fellows are encouraged to imagine—and live—the possibilities of working within and between the library and academic disciplines.

“One Long Muscle”

The summer seminar is the beginning of the path for the fellows. It has changed somewhat each year in response to fellows' suggestions and reflects the changing nature of the world of libraries and the status of the CLIR Postdoctoral Fellowship Program itself. The earliest cohorts were pioneers in a real sense. Over time, the courage of the more intrepid library leaders in hosting these fellows and the accomplishments of these talented individuals, working singly and collectively, have given the program legitimacy and proven its value. As the program has become more established, the seminar has changed in response. We have been able to focus less on the program itself and more on the broad contexts that gave rise to the program's inception and chart its future. Whereas reading essays from the library community that critiqued the program in its early years was once part of the syllabus, we now spend more time with funders, supervisors, and higher education leaders who help us see how the program fits into the puzzle that is higher education. As the number and kinds of fellows continue to grow—with annual cohorts building to 24 and 27 in recent years, from a range of disciplines—we have taken advantage of the increased diversity to use the fellows' own expertise to drive the seminar. We now have more small group sessions or activities in which the fellows themselves serve as experts or

teachers. In the 2015 seminar, for example, we held a THATCamp-style “unconference” for one seminar day in which the new fellows, joined by continuing and past fellows in the Philadelphia area, identified what they need to learn and how they can learn it from each other. The cohort gives fellows a group of people to whom they can turn through their entire career: it allows for a kind of deep networking for people who share a common experience that is significantly different from those of other academics. It is a group of people who have spent a considerable amount of time together in a liminal space where they have allowed themselves as well as been given the permission to question the authority of inherited cultures. As “teachers” of the seminar and as advisors to its educational program, we see our task as helping fellows understand and fearlessly inhabit their new roles. The seminar is the foundation for our shared work, forging a community around a collective identity and oriented to a long view of the academic world.

As the program has matured, and our experience has developed, we have been able to finesse the overall educational program. CLIR staff who have led the program (Christa Williford, Alice Bishop, and Rachel Frick) have spearheaded the drive to ensure that the program’s other educational components—the synchronous sessions and the in-person midyear meetings—are more coordinated with the summer seminar. In the early years of the program, the midyear meeting was held at UCLA, which has hosted many fellows. At the meeting, we would discuss in more detail some of the big issues that had surfaced in the summer seminar. We realized that this sequence of moving from the more general, big picture discussion of the summer seminar to the more detailed conversations of the midyear meetings could be amplified. By holding the midyear meetings in tandem with content-rich conferences (for first-year fellows, the annual membership meeting of the Coalition for Networked Information [CNI] and, for second-year fellows, the annual Digital Library Federation [DLF] Forum), fellows would have the opportunity to come together as a cohort to discuss shared issues and projects, while at the same time having access to much more granular and targeted conversations on particular topics. In other words, what has emerged for us is a deeper understanding of how all of these educational components share “one long muscle.”⁸ It has allowed us to embrace the fellowship program as a transformative learning experience for the fellows, as well as for the institutions and colleagues that they join.

8 “And that’s when you know you will live whether you will or not, one way or another, because everything is everything else, one long muscle” (Oliver 1979, 8).

References

All URLs are current as of September 1, 2015

Archive Journal. Available at <http://www.archivejournal.net>.

Bakhtin, Mikhail. 1981. Epic and Novel. In *The Dialogic Imagination*, edited by Michael Holquist, translated by Caryl Emerson and Michael Holquist, 3–40. Austin: University of Texas Press.

Balsamo, Anne, Penelope Boyer, C. L. Cole, Megan Fernandes, Radhika Gajjala, Sharon Irish, Alexandra Juhasz, Elizabeth Losh, Jasmine Rault, and Laura Wexler. 2013. *Transforming Higher Education with Distributed Open Collaborative Courses (DOCCs): Feminist Pedagogies and Networked Learning*. FemTechNet. New Haven: Yale University. Available at http://femtechnet.org/wp-content/uploads/2014/10/FemTechNetWhitePaperSept30_2013.pdf.

Battles, Matthew. 2003. *Library: An Unquiet History*. New York: Norton.

Brynjolfsson, Erik, and Andrew McAfee. 2014. *The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies*. New York: Norton.

Cook-Sather, Alison. 2001. Unrolling Roles in Techno-Pedagogy: Toward New Forms of Collaboration in Traditional College Settings. *Innovative Higher Education* 26 (2): 121–139. doi:10.1023/A:1012240505690. Available at http://repository.brynmawr.edu/cgi/viewcontent.cgi?article=1027&context=edu_pubs.

Cook-Sather, Alison, Cathy Bovill, and Peter Felten. 2014. *Engaging Students As Partners in Learning and Teaching: A Guide for Faculty*. San Francisco: Jossey-Bass.

Davidson, Cathy N. 2014. Why Higher Education Demands a Paradigm Shift, *Public Culture* 26 (1): 3–11. Available at http://publicculture.dukejournals.org/content/26/1_72.toc.

Davidson, Cathy N., and David Theo Goldberg. 2010. *The Future of Thinking: Learning Institutions in a Digital Age*. Cambridge, Mass: MIT Press.

Healey, Mick, Abbi Flint, and Kathy Harrington. 2014. *Engagement Through Partnership: Students As Partners in Learning and Teaching in Higher Education*. York, England: Higher Education Academy. Available at https://www.heacademy.ac.uk/sites/default/files/resources/engagement_through_partnership.pdf.

Nowvieskie, Bethany. 2011. It Starts on Day One. Blog post, November 12, 2011. Available at <http://nowvieskie.org/2011/it-starts-on-day-one/>.

Oliver, Mary. 1979. "Pink Moon—The Pond." *Twelve Moons*. Back Bay Books.