

Southern Illinois University Edwardsville

SPARK

SIUE Faculty Research, Scholarship, and Creative Activity

2017

Informal learning teams and the digital humanities: a case study of faculty/librarian collaboration

Lora Del Rio

Southern Illinois University Edwardsville, lsmallm@siue.edu

Jessica DeSpain PhD

Southern Illinois University Edwardsville, jdespai@siue.edu

Follow this and additional works at: https://spark.siu.edu/siue_fac



Part of the [Digital Humanities Commons](#), and the [Library and Information Science Commons](#)

Recommended Citation

Smallman, Lora L. and Jessica DeSpain. "Informal Learning Teams and the Digital Humanities: A Case Study of Faculty/ Librarian Collaboration." In *Undergraduate Research and the Academic Librarian: Case Studies and Best Practices*, edited by Hensley, Merinda Kaye and Stephanie Davis-Kahl, 183-194. Chicago: Association of College and Research Libraries, a division of the American Library Association, 2017.

This Book Chapter is brought to you for free and open access by SPARK. It has been accepted for inclusion in SIUE Faculty Research, Scholarship, and Creative Activity by an authorized administrator of SPARK. For more information, please contact magraser@siue.edu, tdvorak@siue.edu.

CHAPTER 15 *

Informal Learning Teams and the Digital Humanities:

A Case Study of Faculty/ Librarian Collaboration

Lora L. Smallman and Jessica DeSpain

Introduction

Since the 2009 founding of the Interdisciplinary Research and Informatics Scholarship Center (or IRIS), a digital humanities and social sciences center at Southern Illinois University Edwardsville, faculty, librarians, and undergraduates have been collaborating to reinvigorate humanities curriculum both within and beyond the classroom.¹ The IRIS Center has become a site where faculty and librarians work together to find solutions to budget shortfalls and changing definitions of higher education. This chapter will discuss the theory, practice, and outcomes underlying one approach to undergraduate research at Southern Illinois University Edwardsville (SIUE). This case study will include a discussion of the intersection of an undergraduate research program, a digital scholarship center, and the university library. SIUE undergraduate students function as collaborators on faculty projects and lead their own research endeavors with faculty and librarians serving as mentors.

* This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 license, CC BY-NC (<https://creativecommons.org/licenses/by-nc/4.0/>).

Background

Southern Illinois University Edwardsville is a regional public university with sixty-five baccalaureate degrees located in Edwardsville, Illinois, just twenty miles northeast of St. Louis, Missouri. SIUE is the newer of two separate institutions in the Southern Illinois University System and has experienced considerable growth in recent years. According to the *2016 SIUE Fact Book*, the fall 2015 semester enrollment was the largest on record for the university, with a total student headcount of 14,265.² Of the students enrolled this term, 30 percent were new to the university, either as first-time freshman or as transfer students. SIUE's student population is commensurate with what one might expect at a regional university. According to Vice Chancellor for Student Affairs Jeffrey Waple, in 2015 "more than 60 percent of SIUE students are first generation students."³

The University consistently does well in *U.S. News and World Report* rankings among its peer institutions, with the exception of sometimes low retention rates.⁴ Although the University encourages students to participate in academic life on campus, most students return home on the weekend, and are attempting to juggle the commitments of work, school, and home. There have been a multitude of studies in higher education literature on student retention rates over the last twenty years that address student financial insecurities and remedial programs, but the recent trend is to examine the environment and structure of campus life, particularly with regard to the relationship between student affairs and academics. In one comprehensive study of student retention at Hamilton College in Clinton, NY, Daniel F. Chambliss and Christopher G. Takacs discovered that close relationships with faculty beyond the classroom were among the most important factors in ensuring student success and retention.⁵ Informal learning opportunities and strong mentoring relationships with faculty may be even more important at a large regional institution like SIUE, where students can become easily lost in the shuffle.

Library and Information Services (LIS) has forty employees as well as numerous student assistants and graduate student assistants. Librarians at SIUE are faculty rank and eligible for tenure. The library is home to approximately 800,000 volumes, collected to support the curricula and research interests of students and faculty. Lovejoy Library has special collections, including but not limited to the Rare Book Room, Eugene B. Redmond Learning Center, National Jazz and Ragtime Archive, and the University Archives. Many items in these collections have been reproduced as digital collections and exhibits in various online spaces, including CONTENTdm. Despite the wealth of resources that LIS provides for faculty and students, it has faced significant challenges in the last ten years. In 2008, SIUE's Lovejoy Library and Informa-

tion Technology Services (ITS) were separated into two units by the Provost. This separation caused the library to relinquish various staff, funding, and electronic resources to ITS and put LIS in the same position as other university departments when asking for technological resources. The library has also been in a precarious political situation because of competing understandings of the role of the academic library in the twenty-first century at an institution of this size and type. As a result, even though there were several librarians among the founding steering committee, IRIS is not currently housed in the library and is not funded by the library budget.

When faculty from the humanities, social sciences, hard sciences, and the library met weekly to plan the IRIS Center in 2009, it became clear that they needed to rethink the R1 model of the digital scholarship center to fit the needs and strengths of the institution and to envision new approaches to faculty/librarian collaboration. The IRIS Center is located in Peck Hall at the Edwardsville Campus, and the space is equipped with a variety of computers, scanners, digital tools, and software. Despite not being housed in Lovejoy Library, the IRIS Center has found ways to collaborate with librarians and learn from their expertise in cataloging, digital preservation, and research. Through this work, both librarians and teaching faculty have learned to frame the IRIS Center as a student-centered humanities and social sciences laboratory.

In order to establish this model, the steering committee developed a relationship with undergraduate education that matched the University mission. Now IRIS has a primary goal of providing the space and opportunity for faculty and students to work closely together beyond the traditional classroom as they build technology that addresses issues and methodologies central to their disciplines.

The IRIS Center reorients how students think about their majors via experiential learning opportunities. At the 2011 Modern Language Association Convention, and later on his blog, Stephen Ramsay controversially defined the digital humanities as being about “building things.” Ramsay’s statement was divisive because other scholars assumed he was excluding theoretical approaches that study rather than manipulate or visualize. However, the most productive aspects of the digital humanities arise when building leads to theorization, and it is this process, unique to the scholarly production of the digital humanist, that is necessary for the undergraduate classroom. According to Tara McPherson, “hands-on engagement with digital forms re-orient[s] scholarly imagination ...because scholars come to realize that they understand their argument and their objects of study differently, even better, if they approach them through multiple modalities and emergent and interconnected forms of literacy.”⁶ These scholarly realizations that arise from “doing” and “building” are just as valuable for student researchers.

Yet, technological literacy can be a struggle for students. Though conventional wisdom has labeled the current student population as “digital natives,” research suggests that access to technology is still largely based on socio-economic status and race. According to educational researcher Joanna Goode, students who develop a technological identity early can impact their ability to manipulate digital environments when they enter college.⁷ 2009 data from the U.S. Census revealed that the lower the household income and educational level in a family, the less likely people are to have access to or use the Internet.⁸ Even when students have Internet access, limited exposure and training has provided them with only basic technological skills. Katherine Mangan wrote in the *Chronicle of Higher Education* that first-generation college students encounter a host of challenges, including being “more likely to arrive academically unprepared for the rigors of college and to require remediation before they can start earning college credit.”⁹ As mentioned earlier, 60 percent of SIUE students are first-generation students and are no exception to these characteristics and lack of experience with technology.

Bringing faculty and students together with a curriculum and research opportunities that focus on faculty/student partnerships in which students are intimately engaged in the active building of technology is the best method for solving these problems. Students in the IRIS Center learn not just how to use technology, but how to effect technological change as they work with professors on publishable research. The IRIS Center had established a design for undergraduate research that gives students room to make mistakes, tinker, and test their knowledge. This takes time, planning, and constant mentorship, but the result is a faculty and student body who benefit from the University’s teacher/scholar model.

These agreed upon pedagogical ideals have resulted in several distinct collaborative applications. Undergraduates take on the roles of project management, database design, file management, and research that traditionally belongs to graduate students. In order to offer students additional incentives for working on IRIS projects, many of the Center’s affiliated faculty apply for opportunities offered through the University’s Undergraduate Research and Creative Activities Program or URCA, which awards students stipends to work on faculty research. In 1990, the Undergraduate Research Academy was established to create research opportunities for SIUE students, and this program evolved into URCA in 2009. The URCA program has since organized and financially supported more than 1,600 students and involved nearly 400 faculty from forty disciplines.¹⁰ There are two levels of this program: assistant and associate. Students are eligible to apply for the URCA associate program to lead their own projects during their senior year. Students of any grade level are welcome to apply for URCA assistant opportunities on faculty-led projects.

This helps faculty and librarians in the IRIS Center to build relationships with students as early as their freshman year. Successful faculty/student collaborations include several examples of digital community outreach, with examples including

- an NSF-funded digital atlas of endangered languages in Nepal;
- an NSF-funded project in which middle school students in East St. Louis build content-rich digital maps about the history and culture of their city;
- an internally-funded project to digitize the photographic record of the Lessie Bates Immigrant Center in East St. Louis;
- an internally-funded project to digitize early issues of the *ALESTLE*, the SIUE student newspaper;
- an internally-funded project to analyze a dataset of bibliographic information from the scholarly journal *African American Review*; and
- an internally-funded event called SIUE THATCamp 2016.

Beyond these projects, in which students play an active role alongside faculty in the design and implementation of research, this year the IRIS Center also began recruiting students for the newly minted digital humanities and social sciences minor, in which students take courses in the computer sciences as well as technology-focused courses in the humanities and social sciences prior to a culminating internship. Finally, IRIS has developed new freshman seminars, interdisciplinary studies courses, and senior assignments that contain DH/DSS content to attract new students and interject informal learning opportunities more directly into University curriculum.

Partnerships

One faculty-led project, *The Wide, Wide World Digital Edition*, led by Dr. Jessica DeSpain, associate professor of English, is a model for building partnerships between the URCA program, the IRIS Center, and the library.¹¹ DeSpain's teaching and research interests include transatlantic literary exchange through the form of reprinted books during the nineteenth century, textual studies, and the digital humanities. *The Wide, Wide World Digital Edition* maps transatlantic publication networks via the development of a digital edition of Susan Warner's 1851 female Bildungsroman, *The Wide, Wide World*. This project brings together, for the first time, the textual and visual variants from 141 reprints of this unstable text to demonstrate how its cultural function and significance shifted with each locale and material reproduction. DeSpain collaborates with URCA assistants who support this scholarship by digitizing materials, creating digital content, and engaging in planning and implementation. The project runs on Omeka, an open source web-publishing

platform, and uses Dublin Core metadata standards to describe and organize the more than 50,000 digital objects associated with the site. Relying on the collaboration of faculty at multiple institutions, sometimes as many as thirteen student editors, University librarians, and SIUE's ITS department, the project brings together a multitude of entities.

DeSpain consults with the humanities librarian for assistance in training the URCA assistants in using the library's resources and developing their information literacy skills. The humanities librarian also contributes in planning discussions with DeSpain and the URCA assistants. The humanities librarian is the subject liaison to the Departments of Anthropology, English Language & Literature, Foreign Language & Literature, and Philosophy. Her responsibilities to these departments include outreach, reference support, library instruction, and collection development.

DeSpain's knowledge, use, and advocacy of libraries made her a natural choice to serve on the hiring committee for the humanities librarian, who began working for SIUE in August 2013. In the early weeks of the fall 2013 semester, DeSpain reached out to the humanities librarian in order to establish a working relationship and to invite her to the training session for undergraduates involved in *The Wide, Wide World Digital Edition*. This session, known as "boot camp," is a four-hour intensive training held at the beginning of every fall and spring semester to reconnect after breaks.

One of the greatest challenges to this partnership was the humanities librarian's lack of knowledge and experience in the digital humanities. This slowed collaborative initiatives as she learned more about digital humanities and gained experience with DeSpain's project and students. Another initial difficulty was defining the humanities librarian's role within the IRIS Center and the URCA program. Throughout the course of the first year, the humanities librarian attended boot camps, participated in IRIS meetings and events, and sought out professional development opportunities. One such opportunity was in November 2013, when the humanities librarian attended the Humanities and Technology Camp, a regional digital humanities unconference, also known as THATCamp St. Louis at Washington University.¹²

The success of this partnership can be attributed to the high value placed on libraries, digital humanities, and undergraduate research. DeSpain and the humanities librarian have a great deal of respect for each other as colleagues, and they also share a genuine enthusiasm and curiosity for the work they do. This temperament, coupled with their professional values and goals, results in a positive environment for undergraduates to gain professional experience and produce dynamic digital projects. This collaboration between faculty, librarians, and students resulted in the creation of a LibGuide, Nineteenth-Century Book History, which helps guide the research needed for the project.¹³ Since arriving in 2013, the humanities librarian has mentored five URCA assistants involved

with IRIS projects who were interested in library science careers. Overall, these types of relationships foster a sense of belonging for undergraduate students, and create experiences which positively influence their academic success.

Reflection

Digital humanities scholarship parallels that of the library science discipline: both are inherently interdisciplinary, thrive on collaboration, and require an aptitude for adopting new digital technology and tools. Academic librarians are in a unique position to understand, provide access to, and nurture the evolution of digital humanities scholarship. An unexpected role for the Humanities Librarian in this collaborative initiative was that of providing career guidance for undergraduates.

Library and information science attracts a variety of backgrounds, but English majors pursuing a graduate degree in library and information science is fairly common. Librarians in any setting have to consider their users and collaborate with each other to classify, preserve, and manage a collection. The IRIS Center, and particularly DeSpain's project, offered invaluable opportunities to experience the work of librarians. The collaborative nature of the IRIS Center has been an important testing ground for students who want to learn what a career in modern librarianship would be like.

Students who work on the project are directly involved in the design and implementation of the site. They also interact with the faculty who collaborate on the project at SIUE, Harvard, and other institutions. In an average semester, students research publishing history, write bibliographical analyses of rare books, create their own digital exhibits for the website, consult on and implement the project's controlled vocabulary, edit portions of the novel from start to finish, and contribute to grant applications. As students become senior project members, they take on greater responsibility that involves developing original scholarly content and training other students.

In the last four years, five students involved in the IRIS Center have been admitted to library and information science programs. The humanities librarian joined *The Wide, Wide World Digital Edition* after it was already well established, but it would be wise to embed librarians in all faculty/student projects of this type from their inception going forward.

Assessment

Part of the success of *The Wide, Wide World Digital Edition* is due to those students who continue to work on the project in subsequent semesters, when

they are no longer receiving financial incentives. These students are incredibly valuable and assist DeSpain in training students new to the team on the background of the project, the digital methods used, how to use software and equipment, how to handle fragile materials, rules and regulations of the IRIS Center, and project goals for the semester.

The most important outcomes to assess for *The Wide, Wide World* and projects like it in IRIS include the level of student engagement in research beyond the classroom and student success both during and beyond their college careers. Five *Wide, Wide World* students have gone on to LIS programs and another ten have gone on to graduate school in other fields. Students feel connected to their work on the project and continue to volunteer beyond the semesters they are awarded URCA funding and even after they graduate from the University.

One former student, who went on to complete an MLS program explained, “This project has taught me to take leaps and to learn with others and on my own. Coding, for example, was a process I previously avoided, but I used my newly acquired confidence to code the e-book of *The Wide, Wide World* after I graduated from SIUE, and I used these skills nearly every day in library school. In fact, I was able to apply some aspect of my work with this digital archive in every class. I knew about the hurdles involved in mass digitization, Dublin Core metadata, and how to navigate digital archive platforms before many of my classmates.” Even as the research into student retention has borne out, for this student, “the most valuable thing was the community of students and faculty with which I had the opportunity to work. Having one-on-one time with a faculty member was one of the most rewarding aspects of my time on *The Wide, Wide World*. I had the opportunity to work side-by-side with Dr. DeSpain for two years; we solved major problems together and shared in frustrations and triumphs. I’ve felt an immense sense of responsibility to this project. It was the first time that the work I was doing and the decisions I was making would affect not only the project that Dr. DeSpain had envisioned, but also how the project would look five years in the future to researchers. This project shaped who I was as a student, and it gave me the courage I needed to add my voice in collaborations. I will continue to apply these skills as I move into my first professional position and beyond.”

In addition to these substantial student outcomes, the model in which faculty and librarians work together with a team of students has had lasting reverberations for both institutions trying to navigate the limitations of a state institution with few resources. The IRIS Center has drawn significantly on the skills and expertise of Lovejoy Library’s librarians. In return, the IRIS Center has trained students in the skills critical to projects taking place in the library at a time when the library cannot afford to hire experts trained in those fields.

Recommendations/Best Practices

Academic librarians who collaborate with teaching faculty and undergraduates on research projects stand to gain meaningful relationships, insight into the research needs of undergraduates and faculty, and opportunities to innovate library resources and services. In this case study, the humanities librarian stepped into a new role that involved guiding undergraduates through library resources as well as potential library science career paths. While the stakes for these informal learning environments are much different and possibly higher than they are in a classroom setting, the rewards are often richer. Collaboration, student ownership, an awareness of audience, and a dynamic that rewards student contribution are essential to a successful project design. As previously mentioned, one example of this student ownership was creating, updating, and using a LibGuide. Undergraduates worked with the humanities librarian to create a tool to make researching book history more efficient.

One of the most innovative aspects of *The Wide, Wide World Digital Edition* is that it demands collaboration among students and faculty. Developing a strategy for recruiting team members that will both complement one another and work well together is paramount for the collaborative spirit of the group to succeed. Faculty should recruit students in their classes that demonstrate an interest in the material, and it is also helpful for student editors to approach classmates that they respect. If the students like who they are working with, they'll be more likely to participate meaningfully in the project.

Likewise, in order to make sure that the group dynamic works successfully, it is important to help students establish ownership over the project while simultaneously encouraging them to relinquish a degree of control as their independent investments merge with the project's objectives. Students should be involved in both the methodological and theoretical underpinnings of the project. Weekly meetings establish consistency and a place to share recent work. At these meetings, students should train one another on aspects of the project and even develop the mechanisms for training. Graduates should also return to share the effects of their earlier work on their careers. For example, a recent NEH Humanities in the Public Square application envisions teams of two students (one from the Honors program and one from the University's program for first-generation college students) working collaboratively with professors to design community outreach curricula. The IRIS Center has found that undergraduates thrive when given the opportunity to teach other students and to take on leadership roles in project decision making.

For many students, an informal research group will be the first time their work will be shared and critiqued by an audience beyond their professors; it presents them with an opportunity to become part of a scholarly community.

The team should have frequent discussions about who the audience is for the project, and students should be expected to share their research with other students, with the broader University community, and in conference forums, so they can see directly see the impact of their work.

It is also important to reward students for their contribution using whatever means possible. They should be given attribution on all projects and paid when the project allows for it. Students have indicated that the one-on-one mentorship and sense of community that occur as a result of the project has become one of its most rewarding aspects, which bears out the results of recent research indicating that relationships with faculty mentors beyond the classroom are among the most important factors in students' retention and success on campus.

Conclusion

Since its creation, the IRIS Center has been a collaborative space that offers students unique opportunities to develop their technological, leadership, research, and critical thinking skills. Collaborating with the library builds bridges between the departments and results in an enhanced experience for undergraduates involved in faculty-led projects. The humanities librarian and DeSpain work together to train students on library research skills and digital humanities methodologies to better engage with digital projects like the *Wide, Wide, World Digital Edition*. This partnership has inspired a new wave of courses and pedagogical approaches at SIUE that employ undergraduate research in innovative ways, and these are quickly leading to a cohort of undergraduate students that are comfortable taking risks, applying new skills, and collaborating with their peers and professors. These students are proof of the value of the work, the community, and the collaboration in spaces like the IRIS Center, and the students themselves offer a compelling reason to develop and support both the digital humanities and digital scholarship centers.

Notes

1. Interdisciplinary Research and Informatics Scholarship Center, accessed September 23, 2016, <https://siueiris.com/>.
2. *FactBook: Institutional Research and Studies*, Southern Illinois University Edwardsville, Edwardsville, IL: Office of Institutional Research and Studies, SIUE (2016), accessed October 21, 2016, <http://www.siue.edu/inrs/factbook/>.
3. Logan Cameron, "New Vice Chancellor for Student Affairs Named," *The Edwardsville Intelligencer* (October 23, 2015), sec. Segue.
4. In 2016–2017, the University tied for #13 in the ranking of best public schools in the Midwest; see the full profile, at "Southern Illinois University Edwardsville," U.S.

- New and World Report* (2016), accessed September 23, 2016, <http://colleges.usnews.rankingsandreviews.com/best-colleges/southern-illinois-edwardsville-1759>.
5. Daniel F. Chambliss and Christopher G. Takacs, *How College Works* (Cambridge: Harvard University Press, 2014), 4; Biren A. Nagda et al., "Undergraduate Student-Faculty Research Partnerships Affect Student Retention," *Inside Higher Education* 22, no. 1 (1998): 55–72; Vincent Tinto, "Colleges as Communities: Taking Research on Student Persistence Seriously," *The Review of Higher Education* 21, no. 2 (1997): 167–77; Glenda Crosling et al., *Improving Student Retention in Higher Education: The Role of Teaching and Learning* (New York: Routledge, 2008).
 6. Tara McPherson, "Introduction: Media Studies and the Digital Humanities," *Cinema Journal* 48, no. 2 (2009): 119–23.
 7. Joanna Goode, "The Digital Identity Divide: How Technology Knowledge Impacts College Students," *New Media & Society* 12, no. 3 (2010): 497–513.
 8. "Computer and Internet Use in the United States: Population Characteristics," May 2013. <https://www.census.gov/prod/2013pubs/p20-569.pdf>.
 9. Katherine Mangan, "The Challenge of the First-Generation Student," *Chronicle of Higher Education* 61, no. 36 (2015): 1–9.
 10. Laura Pawlow and William Retzlaff, "Undergraduate Researchers Become Change Agents for Sustainability," *Council on Undergraduate Research Quarterly* 33, no. 1 (Fall 2012): 28–32.
 11. Jessica DeSpain, Jennifer Brady, Melissa White, and Jill Anderson, *Wide, Wide World Digital Edition*, accessed September 23, 2016, <https://widewideworlddigitaledition.siu.edu/>.
 12. "THATCamp St. Louis 2013," *Washington University Libraries*, accessed September 23, 2016, <http://stl2013.thatcamp.org/>.
 13. Lora Smallman and Jessica DeSpain, "Nineteenth-Century Book History," *Southern Illinois University Library and Information Services*, accessed September 23, 2016, <http://libguides.siu.edu/bookhistory19>.

Bibliography

- Cameron, Logan. "New Vice Chancellor for Student Affairs Named." *The Edwardsville Intelligencer* (October 23, 2015): sec. Segue.
- Chambliss, Daniel F., and Christopher G. Takacs. *How College Works*. Cambridge: Harvard University Press, 2014.
- Computer and Internet Use in the United States: Population Characteristics*. U. S. Census Bureau, 2013.
- Crosling, Glenda, et al. *Improving Student Retention in Higher Education: The Role of Teaching and Learning*. New York: Routledge, 2008.
- DeSpain, Jessica, Jennifer Brady, Melissa White, and Jill Anderson. "Wide, Wide World Digital Edition." Accessed September 23, 2016. <https://widewideworlddigitaledition.siu.edu/>.
- Goode, Joanna. "The Digital Identity Divide: How Technology Knowledge Impacts College Students." *New Media & Society* 12, no. 3 (2010): 497–513. *Interdisciplinary Research and Informatics Scholarship Center*. Accessed September 23, 2016. <https://siueiris.com/>.

- Mangan, Katherine. "The Challenge of the First-Generation Student." *Chronicle of Higher Education* 61, no. 36 (May 22, 2015): 1–9.
- McPherson, Tara. "Introduction: Media Studies and the Digital Humanities." *Cinema Journal* 48, no. 2 (2009): 119–23.
- Nagda, Biren A., et al. "Undergraduate Student-Faculty Research Partnerships Affect Student Retention." *Inside Higher Education* 22, no. 1 (1998): 55–72.
- Pawlow, Laura, and William Retzlaff. "Undergraduate Researchers Become Change Agents for Sustainability." *Council on Undergraduate Research Quarterly* 33, no. 1 (Fall 2012): 28–32.
- Smallman, Lora, and Jessica DeSpain. "Nineteenth-Century Book History." *Southern Illinois University Library and Information Services*. Accessed September 23, 2016. <http://libguides.siu.edu/bookhistory19>.
- "Southern Illinois University Edwardsville, Best Colleges Rankings and Lists." *U. S. News & World Report* (2016–2017). *Southern Illinois University Edwardsville Fact-Book: Institutional Research and Studies*. Edwardsville, IL: Office of Institutional Research and Studies, SIUE, 2016. Accessed October 21, 2016. <http://www.siu.edu/inrs/factbook/>.
- "THATCamp St. Louis 2013." *Washington University Libraries*. Accessed September 23, 2016. <http://stl2013.thatcamp.org/>.
- Tinto, Vincent. "Colleges as Communities: Taking Research on Student Persistence Seriously." *The Review of Higher Education* 21, no. 2 (1997): 167–77.