



CHAPTER 12

APPLIED LEARNING AND THE ACADEMIC LIBRARY:

Creating Opportunities for Students to Lead

Anne Pemberton, Laura Wiegand, and Christopher Rhodes

Introduction

Applied learning, “a pedagogical model that places students in experiences requiring them to integrate theories, ideas, and skills they have learned in new contexts, thereby extending their learning,”¹ is one of the hallmarks at the University of North Carolina Wilmington (UNCW). In 2013, UNCW implemented its Quality Enhancement Plan (QEP) for accreditation review. The plan focuses on applied learning. UNCW, like many other universities, has strengthened its applied learning focus because of its correlation to student success.

Applied learning (of which experiential-learning, service-learning, and active-learning are components) has been linked to enhanced learning outcomes, student retention, job placement, and other positive impacts on students. Research indicates that applied learning increases students’

personal engagement in learning, creating more meaningful learning experiences and opening other doors for students to grow professionally and personally.²

Kuh et al. studied the relationship between student engagement and student success, finding that there was a statistically significant correlation between academic persistence for first-year students and their level of engagement.³ They concluded that universities that offer comprehensive programs designed to increase engagement, such as service learning opportunities, can impact grades and retention rates positively. Other studies confirm that multiple opportunities for students to engage in applied learning provide the most value, citing benefits of job placement and personal growth,⁴ in addition to the positive outcomes for student retention.⁵ This is a widely accepted conclusion backed up by meta-analyses of studies, such as the one conducted by Cielo et al., which find that service learning programs are linked to improved student outcomes in five areas, including “attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance.”⁶

High-impact practices, such as internships, service learning, and study abroad, have been linked in nationwide studies to student success, especially among traditionally underserved populations.⁷ Other universities and schools have committed to a systematic emphasis on applied learning, such as SUNY Potsdam, which recently invested in a Center for Applied Learning.⁸ Institutions, such as George Mason and Evergreen, frequently cited as examples of schools that facilitate student success, all integrate multiple opportunities for service, experiential, and applied learning across the curriculum and throughout the university.⁹

UNCW, and many other schools, have found ways to provide academic, financial, and administrative support to programs that seek to create applied learning opportunities for students.¹⁰ The UNCW program that supports applied learning across the university is called “ETEAL” (Experiencing Transformative Education through Applied Learning).^{*} It provides resources such as funding, training, mentoring, and advertising of opportunities for faculty and students.¹¹ Because of its relationship to student success, applied learning is not only encouraged and supported, it is also a required component of every student’s academic career at UNCW. In the general education curriculum (called

^{*} See ETEAL: An Overview at <http://uncw.edu/eteal/overview/index.html>.

“University Studies”) students are required to complete “Explorations Beyond the Classroom Experience,”¹² which vary among students, but at their core, these are applied learning opportunities. Some students choose to complete faculty-mentored research projects, study abroad programs, internships, or service learning projects. While students are only required to complete one applied learning experience, most students choose to engage in applied learning through several avenues. An applied learning experience might be completed in a single class project or an entire semester overseas. The experiences vary, but the goal is the same.

With an undergraduate enrollment of just over 13,000 students and a graduate population of 1,700, UNCW offers fifty-five bachelor’s degree programs in forty-nine majors, forty-two master’s degree programs, and two doctoral degree programs. William Madison Randall Library is the main library for the campus with one small branch library (the Curriculum Materials Center) housed in the Education Building. There are currently twenty-two librarians and twenty-four staff working full-time, many of whom are engaged in creating applied learning experiences. Not only do students benefit from the participation and completion of these opportunities, the library as a whole benefits, and it provides excellent opportunities for students to lead the library.

Randall Library has facilitated and engaged students in applied learning opportunities in different ways over the last several years. Staff and librarians assist faculty and students in applied learning opportunities, create opportunities for students across the campus, and showcase the outputs of these experiences. This chapter seeks to describe the rationale behind the library’s involvement in these initiatives, give some specific examples of opportunities created by or assisted by the library, and provide guidance on best practices for libraries wishing to engage in applied learning in similar ways. The authors of this chapter have served as leads for many student applied learning projects for the library and have been involved with applied learning at UNCW in a number of ways. Authors previously served as an applied learning fellow at the university,¹³ collaborated with campus partners to create an online applied learning gallery highlighting exemplary projects at the university,¹⁴ and led in the creation of several successful applied learning initiatives in which students participate.

A Culture of Student Leadership through Applied Learning

Randall Library is a highly student-focused organization with student success at the forefront of decision-making and operations. Staff and librarians are dedicated to ensuring students achieve their academic goals. The library is committed to providing an environment, services, and resources that are responsive to student needs. Applied learning has long been one of the methods utilized by Randall Library to engage students in activities that expand their experiential learning opportunities while providing the library with both input about student needs and products that meet them.

As is the case in most academic libraries, librarians are often involved directly with students' research through information literacy instruction, research help desk assistance, or individual consultations with students. In some cases, students may be working on a traditional research paper or presentation. In other cases, students may be gathering research for a directed independent study, a thesis, or in preparation for an internship. In any case, librarians have traditionally had a role in helping students apply the skills they have learned in the classroom to the research product. This has proved to be beneficial for both the library and the student. The student gains research skills and new knowledge about research resources while the library, and specifically the librarian involved, gains insight into students' interests and research behaviors. Students are not usually aware that by providing such input they help transform the services, collections, and spaces the library offers. All librarians at Randall Library are required to work at the Research Help Desk, no matter the position they hold. This is an example of the commitment the library has to student success, and to learning about students and the research endeavors they pursue. In addition to these traditional means of engaging students in applied learning, Randall Library has been able to facilitate student leadership roles along the way.

Expanding Student Leadership through Applied Learning Opportunities

Given Randall Library's role as the center for academic research on campus, students may use the library's unique position as a platform for leadership in applied learning:

1. Students may create library products, with the library serving in the role of “client” for applied learning projects.
2. The entire student body may lead and shape the future of the library through cross-campus collaborations for applied learning initiatives.
3. Students may voice their own ideas using our central location, which fosters conversations related to other campus applied learning projects and to showcase project outcomes.

Randall Library as Client

For applied learning projects that are tied to class assignments, the role of the library has been that of the “client.” The library as a client is, in essence, contracting the services of the student(s) to produce a solution to an identified need. Such solutions may include reports, usability studies, artwork, videos, graphic design, websites, or marketing materials. The collaboration of library faculty and staff with students in two courses (“Typography” and “Introduction to Professional Writing”) provide two examples of the library serving as client.

Changes made to Randall Library’s second floor were a direct outcome of an applied learning project and a prime example of student work leading the library, in this case demonstrated visually to everyone who visits this floor of the library. In contrast with the first floor, where collaborative work and talking is welcomed, the second floor is for silent study. Based on student feedback, library staff recognized that visual cues to indicate that the floor is a quiet floor were needed and sought to launch a student-led “Quiet Campaign.”

To achieve this, the library partnered with “Typography,” a class in the UNCW Department of Art & Art History, and pitched the project as an applied learning opportunity. With the understanding that environmental graphic design exists at the intersection of communication design (design through visual storytelling) and the built environment (design through architecture), typography students were given the following client statement:

Randall Library’s goal is to promote quiet on the second floor, not through signs or redundant “shhh” symbols, but through visual cues that immediately illustrate to

our users the feeling of calm, tranquility, and silence. It is our hope to create the following: a learning environment that inspires study; a space for individual activities; a comfortable and inviting location; and a go-to area for learning. Our experience proves that too many signs can result in creating clutter and do not serve the purpose for which they are intended.

Along with this statement and a series of prompt questions (“What does quiet look like?” “What does it sound like?” “What is the relationship between seeing and hearing (visual and acoustic experience)?” “How can you create a design that will respond to and work within the existing visual environment?”), students were asked to design their own solutions, which were to be visual, noticeable, cost-effective, reproducible, nonpermanent, beautiful, sustainable, and functional.

Each student developed a concept paper that included mocked-up photos of the library along with their design idea, a rationale statement, a list of typefaces they would utilize, recommended materials, ideal color selections, and other necessary information about how their design could be fabricated. The concept papers served a dual purpose: first, they provided the library with a proposed design for the specific space; and second, they challenged the student to draw upon the skills learned in the typography course and apply them to a real world situation.

From the twelve student concepts, the library selected elements from four and partnered with a local vendor to have the designs fabricated into adhesive vinyl images adhered to columns and walls on the library’s second floor. The campaign was considered a success by the faculty instructor, the students, and the library faculty and staff involved. Students applied their skills and, in turn, the library received a viable product, created by students, which is still in use (See Images 12.1 and 12.2). Students have responded well to the outcomes of “The Quiet Campaign;” the second floor is noticeably quieter with students enforcing quiet among themselves. The only signage or marketing indicating that the second floor is for quiet study are the graphics from the applied learning project, yet it is well-known in the student body that quiet is taken seriously on the library’s second floor.



Image 12.1 and 12.2. Images of Quiet Campaign outputs.

For several years, the library has also partnered in applied learning experiences with “Introduction to Professional Writing,” a class in the UNCW English Department. This course gives students an introduction to professional writing, including audience analysis and visual thinking. The format of the final product for the course is different from semester to semester and from instructor to instructor. Examples of products created by students in this course include: brochures that outline a particular service point in Randall Library; videos that introduce other UNCW students to various services or locations in Randall Library; usability study reports that analyze and provide feedback for various library websites; and posters that provide instructions on library technology (e.g. microform reader instructions). In each instance, the course instructor has contacted a librarian and described the focus of the course. The instructor and the librarian(s) work together to identify an area in need of student input or a product best created by students. This theme is worked into a practical class project for that semester. After this initial discussion, the librarian is invited to come speak with the students and provide necessary background information. Then the project is turned over to the students and they are asked to take the lead. If they need feedback, additional information, or

review of drafts, the librarian(s) are available. At the end of the semester, the students present and share the outcomes of their projects to the librarian(s), and the librarian(s) provides feedback on the students' work, including information about how it will be used (e.g., if a video will be included on the library's website).

The fall 2015 semester's project was to provide usability reports on Randall Library's "BUILD Tutorial" (Beginning Undergraduate Information Literacy Development).^{*} Based on Notre Dame's "Pot of Gold,"[†] this tutorial was launched in fall 2015, and all students enrolled in the university's required First Year Seminar were expected to complete it. The library needed students to provide feedback and make suggestions about the tutorial, and the students enrolled in "Introduction to Professional Writing" needed to complete a usability project. Students applied concepts learned throughout the semester to the usability process. Working in small groups, students went through the tutorial in its entirety and wrote a final report with recommendations, all of which were reasonable, thoughtful, and useful. Students suggested that the graphics be updated to look more modern, to shorten particular sections, and to change the tutorial navigation. These recommendations, and others, are in the process of being implemented, and the tutorial will be better because of this applied learning experience and students' leadership. The student suggestions are shaping the future development of this tutorial, which will likely be used for years to come.

Creating Leadership Opportunities through Cross-Campus Collaborations

The best example of creating student leadership opportunities through cross-campus collaboration is Randall Library's annual Flash Fiction contest. The Flash Fiction contest is a creative writing contest, open to all UNCW students. It aims to stimulate a conversation among participants about a current library issue and to encourage student leadership. Flash Fiction puts students in charge as they write, illustrate, and copyedit stories

^{*} For more about BUILD: Beginning Undergraduate Information Literacy Development see <http://library.uncw.edu/build/>.

[†] See the Pot of Gold Information Literacy Tutorial at <https://library.nd.edu/instruction/potofgold/>.

before assembling them all into a high-quality anthology for distribution throughout the campus and beyond. Flash Fiction places Randall Library at the center of a student learning initiative that connects different academic branches of the university through a common endeavor linking creating writing, art, and publishing. Through the Flash Fiction Contest, students get hands-on experience in graphic design with the Department of Art & Art History and in publishing with the Department of Creative Writing's Publishing Laboratory. At the library, after the contest details are set, planning begins on a book reception and party that will be student led from beginning to end with readings, discussions about process, and a display of the winning stories and illustrations.

Early in the spring semester, the library chooses a relevant theme. Once the contest is announced, participants are given five days to write a 500-word (or less) piece of fiction on the theme, which mentions Randall Library. Cash prizes are offered for the top three winners, but the real honor is getting published. Once the stories are collected, the entries are whittled down by a group of judges who choose the top three stories and select a number of runners up.

Graphic design students create illustrations to accompany the stories, with the library acting as client and mediator. Graduate students in the Publishing Laboratory are responsible for putting together the Flash Fiction anthology (including cover art, copyediting, book design, etc.). Library representatives provide mentoring to the students working in the Publishing Lab and manage the content details, but the outcome is very much student-driven.

The final element of the annual Flash Fiction contest is a book reception and party, where the fruits of the applied learning labor are celebrated and shared among the students. At the event, the professionally published books are handed out, student writers read their winning stories, illustrators talk about the challenges involved in designing for fiction, and book publishers-to-be lecture on books as craft. Flash Fiction has become a popular, fun, engaging experience, and student participants have commented on feeling a sense of accomplishment upon completion. It provides students with an opportunity to apply their skills, produce tangible outcomes in the library and on campus, and gives the library an opportunity to work with students directly.

More Than Four Walls: A Showcase of Applied Learning and Leadership

Randall Library is not just a laboratory where applied learning initiatives can ignite and develop, it also serves as a place for showcasing applied learning byproducts and fostering conversations about the importance of student learning through hands-on experience. Randall Library provides opportunities for students to spotlight applied learning for their faculty, other students, parents, and the community. The library has several areas for exhibits and programming, so it is a natural meeting space for UNCW academic departments to display and celebrate student-initiated projects such as the Flash Fiction contest. In addition, the library hosts twice yearly poster sessions for the UNCW Wentworth Fellows' and the Undergraduate Research and Creativity Showcase, which feature students as leaders in research at the institution. The Wentworth Fellowship was established in 2001 to enable a select number of students to travel to sites, nationally or abroad, associated with literary authors and texts. The Undergraduate Research and Creativity Showcase, which highlights innovative student research and creative scholarly activity, is on display for the entire campus and community, exhibiting upward of seventy-five student posters. Undergraduate research and study abroad are both core categories of applied learning supported at UNCW. During the times of the year when these projects are on display, areas of Randall Library overflow as student research becomes a focal point. The poster sessions are widely attended by the campus community and provide students facetime with faculty from around campus, often including the university's upper administration. This is an unparalleled opportunity for students to discuss their research with the people who lead UNCW, and it allows Randall Library staff and faculty to experience firsthand how their day to day work informs student success.

In the fall of 2015, the student work once again appeared front and center at the library as the largest gallery space in the library showcased "Dubtown Skates: Skateboarding Culture and Applied Learning at UNCW." In this exhibit, skateboard designs from students enrolled in the Art & Art History Department course, "Two-Dimensional Design," highlighted what they learned about the fundamentals of art through a hands-on project judged by a local business owner. To draw attention to the exhibit, the student artists, the instructor, and the owner of a local surf and skateboard

shop came together to discuss the project, the art, and the rich skateboard culture on the UNCW campus in a panel discussion event hosted by the library. The event attracted a wide range of users to Randall Library, including members of the community, and allowed the library to show off its public art from local artists. This was a unique opportunity for students interested in both art and skateboarding to lead the campus community in a discussion about the intersection of the two. Individuals who had never set foot in the library were drawn to this exhibit and potentially created new library users.



Image 12.3. Image of “Dubtown Skates” panel along with skateboard deck art.

The library has also been a partner for providing virtual spaces that showcase student work and facilitate discussions. Students expressed a need for such spaces, so the library created them. Given the library’s experience with digital collections, online exhibits, and web technologies, this was a natural partnership between students and the library. The desire to showcase students’ applied learning projects drove a library initiative to create the “Applied Learning Gallery.”¹⁵ The library partnered with other academic units to create this space, which allows students to describe, in their own words, their completed applied learning projects and to share these projects with prospective employers, graduate schools, and others.

In addition to providing a space to showcase exemplary applied learning projects, this website was also designed to connect the various partners who participate in and support applied learning, both across the university and in the community. It is set up to serve as a selective archive of examples, helping both faculty and students to identify types of projects that have been completed in the past, and to provide them with ideas for future projects. Library faculty and staff expertise was employed to create and maintain a website for users to search and browse projects. Students can upload and describe their projects themselves, and administrators can review and publish submissions. Without student leadership, this showcase might never had been created. The library served as the technical developer, graphic designer, project co-lead, and web hosting service for the site. While providing support for this particular online space may seem outside of the normal scope for a library, this collaboration depicts the library as a valuable partner in campus applied learning initiatives, and gives students a space where they can talk about applied learning on their own terms.

Best Practices

The first step in encouraging student leadership through applied learning is to identify campus partnerships, including instructors interested in adding a service or experiential learning component to their classes, or programs that produce outcomes that could be displayed or integrated into library programing. These partnerships may stem from pre-professional programs where students are seeking opportunities to apply their learning, or from campus services such as the Career Center or Undergraduate Research Centers, which actively support student activity related to applied learning.

To be a successful client for class assignment and projects, the library should work with the instructor to set clear, achievable goals for the project, and to provide sufficient background information and supporting materials. Library faculty and staff found it helpful to provide background information and an explanation of the identified need in a variety of formats, such as a written client statement, a video introduction, links to information, a classroom visit (or synchronous meeting time) both at the introductory stage and, if possible, a follow-up visit at the first draft stage.

It is important to remember that unlike when contracting with a professional service, the outcome is dictated by the needs of the assignment

and instructor, as well as the skills and limitations of the students. This is a pedagogical activity with the goal of enhancing student learning, and not with the goal of giving the library a solution that they can use out of the box. It is also important to be aware of the limitations of classroom time. The outcomes sought by the library should be realistic and based on the amount of time in the class dedicated to the project. During the duration of the project, the client (the library) should be available to promptly answer student requests for clarification if they arise. If time permits, the client may want to give feedback at the draft stage so that the students know if they are on the right track. The outcomes of the project should be shared with the client, ideally in presentation style or a final project report, including any associated products in electronic format. Finally, the client should provide feedback or, even more effectively, demonstrate real-world use of selected work to the students. Assessing and acknowledging student work is an important part of applied learning, otherwise the student is not informed of the practical outcome of their work nor informed about improvements that could be made to their skillset.

When students are given the opportunity for creativity, the results can be completely unexpected. However, it can be difficult for libraries to relinquish preconceived ideas of what the outcome should be or look like. Be prepared from the outset to accept (and encourage!) creativity. If the product must conform to certain standards, make sure to explain these at the outset. Try not to let past practices (e.g., “Our brochures are always in this format!”) dictate the outcomes; instead, be ready for surprising interpretations of your instructions.

For a more formal overview of best practices, consult the National Society for Experiential Education’s “Eight Principles for Experiential Learning.”¹⁶ They state that “Intention, Preparedness and Planning, Authenticity, Reflection, Orientation and Training, Monitoring and Continuous Improvement, Assessment and Evaluation, Acknowledgement” should be incorporated into all applied learning. Even when serving as a client, understanding these best practices can help the library be a better partner to faculty and instructors, and facilitate successful applied learning and leadership.

When creating cross-campus applied learning opportunities, such as the Flash Fiction contest previously described, best practices include effective communication with the other collaborators, agreeing upon out-

comes at the outset, and determining ahead of time who will take the lead on different parts of the project. It is important for each group to outline individual expectations from the beginning, bearing in mind that the goal of applied learning is to produce student outcomes. Various collaborators should focus on the activities and outcomes that meet the students' needs, not necessarily the needs of the department or campus unit. From the students' point of view, to reduce confusion it is also important that it is clear who the lead is, what their expectations are, and with whom the student should be communicating. Certainly, students are leaders in these opportunities, but even leaders need boundaries and guidance. In some instances, the library has found that it is best if the students report only with their assigned instructor and that any cross-departmental correspondence occur only between campus staff members.

As discussed above, one of the easiest ways of supporting applied learning is by offering the library facility or virtual space to foster conversations and showcase outcomes of applied learning. This can be through gallery space to display artwork, projects, or virtual online galleries of project outcomes. In these situations, the library should treat the students with the same professional respect that they would treat any user or group who was occupying the space for an exhibit or program by providing adequate space, signage, and marketing. This also means that students, like any other professional person or group, should be expected to meet deadlines and follow rules and decorum of the building or virtual space. Creating and hosting a programming event for the campus or community around the students' work is another way to extend the reach of the students' work and provide potential networking opportunities.

Benefits of Participating in Applied Learning

The benefits of supporting applied learning in the library include products created at no cost, opportunities to educate the students about the client (library), and occasions to network with project stakeholders (campus partners, faculty, etc.).¹⁷ Randall Library has received tangible products, such as signage, displays, marketing products, and assessment (including usability reports), as a result of these projects.

Being a client for applied learning projects has also allowed the library to share issues and concerns with students, faculty, and other campus partners,

who gain a deeper understanding of the academic library. Conversely, by interacting with students beyond the research help desk, library faculty and staff can keep current with each population of students, learning more about students' interests, perceptions, and the academic environment, and encouraging them to take an active leadership role in changing their library. In addition, faculty, instructors, and other campus units view the library as a partner in student success outside of the standard role of providing library materials and information literacy instruction and assistance. Through collaboration, the library also learns about faculty interests and teaching practices.

Finally, many universities have identified applied learning as a strategic priority in their campus planning. It is crucial that the library demonstrate its value to the campus community. Aligning the library's initiatives with a university strategic goal demonstrates the library's value and relevance to the institution. Other libraries may wish to follow suit and determine if applied learning is important to their institutions and to create opportunities for the library to facilitate applied learning. Depending on the programs in place at the institution, there may also be funding opportunities to support applied learning initiatives, either for the students involved or for the library. At UNCW, the applied learning opportunities provided by the library are seen as a service to the university, and the campus has recognized this in tangible ways. For example, Randall Library received seed money from the campus for an Honors papers digitization project because hosting student projects was a priority to the university.

Conclusion and Future Plans

Library faculty and staff have discussed other avenues for participation in applied learning with a focus on facilitating student leadership. UNCW is currently investigating a campus-wide e-portfolio requirement and the library can likely be involved in this effort. Also, perhaps students can provide needed input. The university's institutional repository (IR), administered by the library, is yet another arena for students to provide leadership to the library in order to best showcase applied learning to the campus. While initially focused on including faculty publications only, the IR has recently been expanded to include student work.

Additionally, opportunities such as the Flash Fiction Contest will be continually expanded and improved. Plans for the 2016 contest include a

connection to a UNCW Student Art Invitational curated by the faculty of the Department of Art & Art History and juried by members of the community. The reception and book party will double as an art opening, where the library and university community can celebrate the physical manifestation of student work and skills, and provide a showcase for student initiative and leadership.

The library's involvement in applied learning continues to expand and continues to be a useful and gratifying experience for students and library faculty and staff. Randall Library is proud of the work it has done to serve as a client, create opportunities for applied learning, and showcase applied learning experiences. Other academic libraries could benefit from exploring these opportunities at their institutions. Working with campus instructors and students to engage the library in the learning process is beneficial for all involved, and serves to place students in valuable leadership roles in the academic library.

Notes

1. "What Is Applied Learning?" University of North Carolina Wilmington, last accessed April 7, 2016, <http://www.uncw.edu/eteal/overview/AppliedLearning.html>.
2. Michele Wolff and Shannon M Tinney, "Service-Learning & College Student Success," *Academic Exchange Quarterly* (Spring 2006): 57–61.
3. George Kuh, Ty Cruce, Rick Shoup, and Jillian Kinzie, "Unmasking the Effects of Student Engagement on First-Year College Grades and Persistence," *The Journal of Higher Education* 79, no. 5 (2008): 540–563.
4. Jeffrey Coker and Desiree J. Porter, "Maximizing Experiential Learning for Student Success," *Change: The Magazine of Higher Learning* 47, no. 1 (2015): 66–72.
5. Meaghan Mundy and Janet Eyler, "Service-Learning & Retention: Promising Possibilities, Potential Partnerships" (Report No. ED482320), last accessed April 7, 2016, <http://eric.ed.gov/?id=ED482320>. 2002.
6. Christine Celio, Joseph Durlak, and Allison Dymnicki, "A Meta-Analysis of the Impact of Service Learning on Students," *Journal of Experiential Education* 34, no. 2 (2011): 164–181.
7. Ashley Finley and Tia Brown McNair, *Assessing Underserved Students' Engagement in High-Impact Practices*. (Washington, DC: Association of American Colleges and Universities, 2013).
8. "Center for Applied Learning," The State University of New York at Potsdam, last accessed April 7, 2016. <http://www.potsdam.edu/academics/appliedlearning/>.
9. George Kuh, Jillian Kinzie, John Schuh, and Elizabeth Whitt, *Student Success in College: Creating Conditions That Matter*. (San Francisco: Jossey-Bass, 2010).
10. Tom Ehrlich, "Service-Learning in Undergraduate Education: Where Is It Going?" *Carnegie Perspectives*, July 2005, last accessed April 7, 2016, <http://files.eric.ed.gov/fulltext/ED498997.pdf>. 2005.

11. Jacquelyn Lee, Kristen DeVall, Jess Boersman, Jimmy Reeves, and Melanie Forehand, "Cultivating Community Engagement through Applied Learning: A Transformative Campus-Wide Model," Presentation at the Pathways to Achieving Civic Engagement (PACE) Conference, University of North Carolina Wilmington, Wilmington, NC, February 5, 2014.
12. "University Studies," University of North Carolina Wilmington, last accessed April 7, 2016, <http://uncw.edu/universitystudies/>.
13. "ETEAL for Faculty and Staff," University of North Carolina Wilmington, last accessed April 7, 2016, <http://uncw.edu/eteal/overview/Faculty.html>.
14. "Applied Learning Gallery," University of North Carolina Wilmington, last accessed April 7, 2016, https://randall3.uncw.edu/applied_learning/.
15. "Applied Learning Gallery," University of North Carolina Wilmington, last accessed April 7, 2016, https://randall3.uncw.edu/applied_learning/.
16. "Eight Principles of Good Practice for All Experiential Learning Activities," National Society for Experiential Education, last accessed April 7, 2016, <http://www.nsee.org/8-principles>.
17. Leora Waldner and Debra Hunter, "Client-Based Courses: Variations in Service Learning," *Journal of Public Affairs Education* 14, no. 2 (2008): 219–23.

Bibliography

- Celio, Christine, Joseph Durlak, and Allison Dymnicki. "A Meta-Analysis of the Impact of Service Learning on Students." *Journal of Experiential Education* 34, no. 2 (2011): 164–181.
- Coker, Jeffrey and Desiree J Porter. "Maximizing Experiential Learning for Student Success." *Change: The Magazine of Higher Learning* 47, no. 1 (2015): 66–72.
- Ehrlich, Tom. "Service-Learning In Undergraduate Education: Where Is It Going?" *Carnegie Perspectives*, July 2005. Last accessed April 7, 2016. <http://files.eric.ed.gov/fulltext/ED498997.pdf>.
- Finley, Ashley and Tia Brown McNair. *Assessing Underserved Students' Engagement in High-Impact Practices*. Washington, DC: Association of American Colleges and Universities, 2013.
- Hesburgh Library, University of Notre Dame. "Pot of Gold Information Literacy Tutorial." Last accessed April 7, 2016. <https://library.nd.edu/instruction/potofgold/>.
- Kuh, George, Ty Cruce, Rick Shoup, and Jillian Kinzie. "Unmasking the Effects of Student Engagement on First-Year College Grades and Persistence." *The Journal of Higher Education* 79, no. 5 (2008): 540–563.
- Kuh, George, Jillian Kinzie, John Schuh, and Elizabeth Whitt. *Student Success in College: Creating Conditions That Matter*. San Francisco: Jossey-Bass, 2010.
- Lee, Jacquelyn, Kristen DeVall, Jess Boersman, Jimmy Reeves, and Melanie Forehand. "Cultivating Community Engagement through Applied Learning: A Transformative Campus-Wide Model." Presentation at the Pathways to Achieving Civic Engagement (PACE) Conference, University of North Carolina Wilmington, Wilmington, NC, February 5, 2014.
- Mundy, Meaghan and Janet Eyler. "Service-Learning & Retention: Promising Possibilities, Potential Partnerships" (Report No. ED482320). Last accessed April 7, 2016. <http://eric.ed.gov/?id=ED482320>. 2002.

- National Society for Experiential Education. "Eight Principles of Good Practice for All Experiential Learning Activities." Last accessed April 7, 2016. <http://www.nsee.org/8-principles>.
- The State University of New York at Potsdam. "Center for Applied Learning." Last accessed April 7, 2016. <http://www.potsdam.edu/academics/appliedlearning/>.
- University of North Carolina Wilmington. "Applied Learning Gallery." Last accessed April 7, 2016. https://randall3.uncw.edu/applied_learning/.
- University of North Carolina Wilmington. "ETEAL: An Overview." Last accessed April 7, 2016. <http://uncw.edu/eteal/overview/index.html>.
- University of North Carolina Wilmington. "ETEAL for Faculty and Staff." Last accessed April 7, 2016. <http://uncw.edu/eteal/overview/Faculty.html>.
- University of North Carolina Wilmington. "University Studies." Last accessed April 7, 2016. <http://uncw.edu/universitystudies/>.
- University of North Carolina Wilmington "What Is Applied Learning?" Last accessed April 7, 2016. <http://www.uncw.edu/eteal/overview/AppliedLearning.html>.
- Waldner, Leora and Debra Hunter. "Client-Based Courses: Variations in Service Learning." *Journal of Public Affairs Education* 14, no. 2 (2008): 219–23.
- William Madison Randall Library, University of North Carolina Wilmington. "BUILD: Beginning Undergraduate Information Literacy Development." Last accessed April 7, 2016. <http://library.uncw.edu/build/>.
- Wolff, Michele and Shannon Tinney. "Service-Learning & College Student Success." *Academic Exchange Quarterly*, (Spring 2006): 57–61.