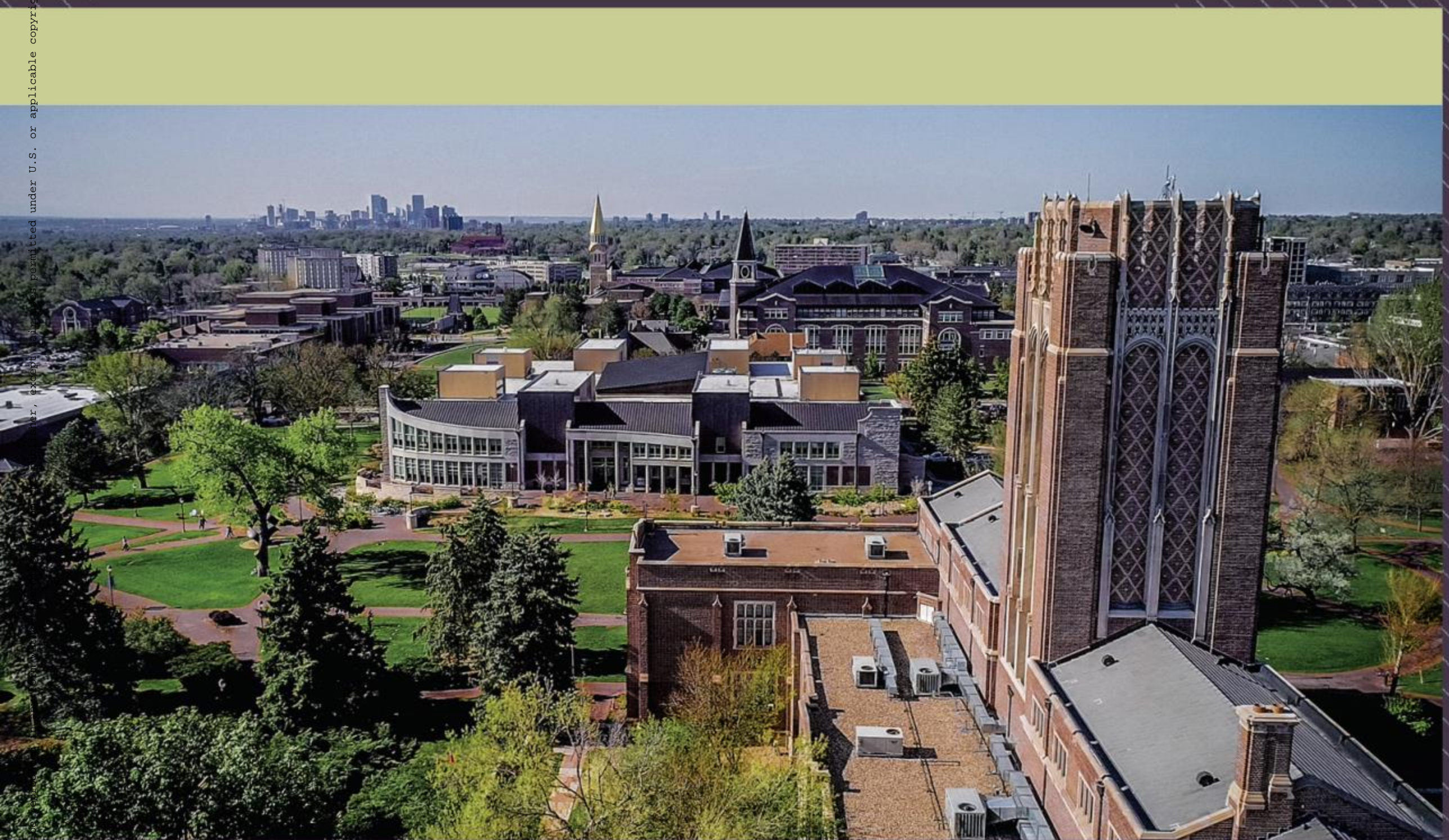


SUCCESSFUL CAMPUS OUTREACH FOR ACADEMIC LIBRARIES

**Building Community
through Collaboration**



**Edited by PEGGY KEERAN
and CARRIE FORBES**

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Edited by
Peggy Keeran
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ROWMAN & LITTLEFIELD
Lanham • Boulder • New York • London

Published by Rowman & Littlefield
An imprint of The Rowman & Littlefield Publishing Group, Inc.
4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706
www.rowman.com

Unit A, Whitacre Mews, 26-34 Stannary Street, London SE11 4AB

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British Library Cataloguing in Publication Information Available

Library of Congress Cataloging-in-Publication Data Available

ISBN 978-1-5381-1370-7 (hardback : alk. paper) | ISBN 978-1-5381-1371-4 (pbk. : alk. paper) |
ISBN 978-1-5381-1372-1 (ebook)



TM The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48-1992.

Printed in the United States of America

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Preface

This book was originally conceived by our colleague, who unfortunately was unable to finish the project. As we have both served as subject librarians for a number of years, we have a passion for connecting with students and faculty and took over this project in order to ensure that the authors in this volume would have the opportunity to share their successful and innovative outreach ideas and programs. The vast amount of literature published on outreach suggests that libraries, in an effort to remain viable in the face of competing information outlets, recognize the need to reach out to their students, faculty, and staff. Library outreach encompasses many facets of public services in libraries, including planned activities and programs, assistance with the research process through liaison work, classroom instruction, and promotion of library services and collections. Much has been written concerning outreach, programming, and marketing for academic libraries; so, why this book?

In a climate of great challenges to higher education and increasing pressures on all campus units to assess and justify their services, effective outreach and marketing must help “tell the story” of the library to administrators and ensure the library remains central to campus intellectual life. Successful library outreach programs must carefully balance the needs of the entire campus community while also supporting both library and institutional missions and goals. Academic libraries support outreach for many reasons—to communicate with their users, to encourage use of the library and its resources, and to promote a positive image on campus and in the community—but the activities that libraries use to fulfill these purposes run the gamut. Outreach is programming. Outreach is marketing and branding. Outreach is games, exhibits, and scavenger hunts. Outreach involves assessment and soliciting feedback from users. Outreach is about engaging with the local community beyond the university. Outreach is about connecting with margi-

nalized communities who don't use the library or who may not feel welcome to use the library. Outreach is about promoting spaces, collections, and services. However, outreach is also fundamentally about *connections*, *community*, and *collaboration*. While many libraries have positions dedicated to outreach and promotion, outreach is an essential component of all aspects of an academic library. Put simply, our broad vision for this book was an inclusive definition of outreach that explores the various ways that academic libraries are connecting and collaborating with internal and external partners to respond to the needs of their communities.

The chapter authors in this volume hold a wide variety of job responsibilities, including reference and instruction librarians, subject specialists, exhibits coordinators, digital initiatives librarians and, of course, outreach librarians. Each author brings diverse perspectives to the concepts of outreach and engagement that can benefit academic librarians, whether working at community colleges or doctoral-granting institutions. Weaving together the common themes found throughout this volume, Elia Trucks, as an early career professional with a passion for outreach, provides a fresh perspective and in-depth summary of the chapters and topics covered in the introduction.

This edited book brings together a variety of creative ways academic libraries are engaging with their communities through outreach, and, as noted in the introduction, with the spirit of collaboration as a major theme throughout. As a compendium of best practices, it serves as a resource for academic librarians to discover new programming ideas, to learn principles of effective marketing, and to help them think strategically and programmatically about outreach activities of all types. Through reflective essays and case studies, this volume also provides librarians with innovative ideas on everything from strategic planning to the nuts and bolts of successfully implementing new programs to perspectives on reaching new audiences, including underrepresented students and members of local communities. This volume will also be helpful for library administrators interested in exploring how outreach initiatives fit into strategic planning, as well as library and information science graduate students interested in future careers in this area.

Perhaps the most notable strength of this book is its focus on the interesting and resourceful ways that librarians identify service gaps, and how they engage with their communities to develop collaborative outreach initiatives. Our hope is that readers will begin to see collaborative ventures not just as a way to be more efficient and save money, but as the *best way* to improve and enhance library collections, services, and spaces and to build strong relationships across our campuses and communities. After all, if academic libraries see themselves as the intellectual heart of a campus, shouldn't they also serve as the connecting tissue that brings life to collaborative endeavors within a university and beyond its walls?

Introduction

Elia Trucks

DEFINING OUTREACH

Outreach encompasses many facets of public services in libraries, including planned activities and programs, assistance with the research process through liaison work, classroom instruction, and promotion of library services and collections. In academic libraries, programs can include anything from stress relief and finals week activities to new student orientation, liaison programming for faculty, and book clubs. Each activity has different goals and objectives, but all strive to build relationships between libraries and their patrons, partners, and communities. Without effective promotion and marketing, patrons may be unaware of the activities, services, and resources that the library offers. As such, marketing is an integral part of outreach that requires effort and assessment to ensure that it is effective and useful.

While all of these activities fall under the broad umbrella of outreach, the approaches and time spent on these activities varies from library to library. Since many public services librarians engage in outreach as part of their work, there is always a need for new approaches and ideas. The chapters in this volume share insights into successful outreach programs and provide ideas for existing and new outreach efforts.

Many of the chapters offer case studies of an author's outreach initiatives, while others are more philosophical or explore theoretical frameworks. The major theme that runs through all of the literature is the spirit of collaboration. Collaboration with stakeholders is key to increasing involvement and creating value in the larger community. Stakeholders can include internal library staff and faculty, campus departments and organizations, the target audience for a program or activity, the general public and the local community, and more. The Association of College & Research Libraries (ACRL)

report, *Academic Library Impact: Improving Practice and Essential Areas to Research*, captures some of the best practices and areas for improvement across academic libraries. One of the most important themes to come out of the discussions was the emphasis on collaborating with educational stakeholders (Association of College & Research Libraries 2017, 28).

Since outreach can be so broad and varied, these critical services may not always be called by the same name. In a survey of libraries' outreach committees and positions, Toni Carter and Priscilla Seaman discovered that most of the participants have mission statements that included variations on two objectives: "(1) to promote library services, resources, collections, facilities, and initiatives, or (2) to raise or increase user awareness of the same" (2011, 167). The fact that these ideas are integral to the mission of the library underlines the value of incorporating outreach into any library's planning process.

Each chapter describes the plan and execution of outreach activities in academic libraries, and none could have been completed without buy-in from stakeholders. Finding the right balance of resources for engagement without losing sight of the library's mission can be a tricky needle to thread, and the chapter authors discuss the different levels of partnership and connection that are possible.

STRATEGIC VISION AND PLANNING

Strategic planning has become an integral part of the organizational development of universities and academic libraries in recent years. This process helps define a mission and a vision, aligns those concepts with stakeholders, sets goals, and creates a strategy for achieving those goals (Brown and Gonzalez 2008). While strategic plans are more often associated with corporations or high-level organizational goals, they can be adapted for a smaller scale, such as for a department, a unit, or even an outreach librarian.

Taking a page out of Business 101, librarians can look to successful marketing plans from companies and businesses for inspiration. Without a strategic plan or vision for outreach initiatives, programs can become disconnected, useless, or out of touch with the target populations. The first chapter in this book describes how outreach can be incorporated into a strategic plan. In "Plan, Prioritize, and Partner: A Model to Create Successful Outreach Programs and Events," Rosan Mitola designs a framework for outreach that considers stakeholders, audience, and specific programs to best support the library's existing strategic plan. This chapter touches on many aspects of a comprehensive strategic plan for outreach, and offers resources to help librarians create their own. Rochelle Smith emphasizes in her chapter, "Reconceptualizing Outreach: Leveraging Librarians' Knowledge and Curiosity to

Enhance Collaboration,” a fresh take on outreach that connects a librarian’s interests outside the classroom with students and faculty. Librarians can model curiosity and exploration in a more informal type of outreach. Courtney Lundrigan’s chapter, “Teaching to Learn and Learning to Teach: Using Theoretical Models to Plan Outreach to Student Peer-Mentoring Programs,” discusses her efforts to incorporate information literacy through student organizations. She develops a theoretical framework around peer tutoring and mentoring, and applies it to a student association’s existing mentorship program to incorporate information literacy elements. The chapters in this first section are starting places to explore creating a larger plan or rethinking existing approaches to a librarian’s outreach initiatives.

FROM START TO FINISH: DEVELOPING AND IMPLEMENTING SUCCESSFUL PROGRAMS

The chapters in the second section take an in-depth look at specific programs, including planning stages, marketing, execution, and assessment. These case studies explore the difficulties and triumphs that each author encountered. Mandy L. Havert’s chapter, “Building Boot Camp Success: Graduate Dissertation and Thesis Programs at the University of Notre Dame,” is a deep dive into the wildly successful “boot camp” program that has been a smash hit with graduate and doctoral students. In “Money Smarts: Collaborating for Financial Literacy,” Esther Gil discusses her programs around the American Library Association’s (ALA) national initiative of Money Smart Week. She recognized a gap in students’ knowledge of financial literacy and engaged with multiple on- and off-campus partners that agreed on the importance of financial literacy. The support from campus partners, community members, and local businesses helped kick-start a popular series of programs that have grown each year. Toong Tjiek Liauw’s chapter, “Library Outreach and Campus Communication: The DIVo Project,” explores how a new technology platform, spearheaded by the library, increased library visibility and improved relationships across campus. The digital signage network’s new 3.0 phase as described in the chapter has expanded to making the campus more “green” by eliminating printed advertisements; promoted digital expressions of faculty and student works for classes, research, and assignments; and offered new research opportunities for students looking at the engagement and use of the system. Their project even spawned a new popular jargon, “DIVo-ed,” to describe when a project has been featured on the screens. Each of these initiatives explores creative means for developing programs and services that can provide inspiration and possibilities to librarians looking to create their own projects.

COMMUNITY OUTREACH: THE ACADEMIC LIBRARY IN THE COMMUNITY

The ALA's stated Core Values of Librarianship include diversity, the public good, service, and social responsibility (2006). These principles establish the role of the library to support the common good, and outreach is one way for librarians to work toward that lofty goal. Community partners are a valuable potential audience for academic libraries in supporting the common good. The authors writing for this section create vibrant and interesting programs to connect with the wider community. Strengthening these bonds can generate goodwill, raise the profile of the library, and do good work with new audiences. In "Academic Libraries and STEM Outreach Programs: Connecting the Library and the Community," Naomi Bishop creates programs to support underrepresented high school students, specifically minorities and women, with a focus on STEM fields, in order to build a love of learning and research inquiry. Her initiatives include a Day of Action with activities to inspire creativity and investigation, an American Indian College Fund for a summer undergraduate research internship, and a makerspace workshop with hands-on 3D printing and Tinkercad projects. Similarly, Paul Mascareñas and Janet Lee's outreach to high school students in their chapter, "Regis University and Arrupe Jesuit High School: Information Literacy Outreach to Help Students Succeed in High School and College," has a similar goal: to open up the possibilities for students and expose them to the learning experiences that are available to them. Chapter 8, "Academic Library Exhibits and Programs: Outreach through Campus and Community Partnerships," explores Manju Prasad-Rao's exhibits. Traveling exhibitions require extensive collaboration with campus departments and stakeholders in order to reach the local community, creating bonds with public libraries, schools, and lifetime-learning organizations. Each chapter reveals new possibilities for academic libraries as leaders in their communities, focusing on high school students, the community at large, and others.

BROADENING LIBRARY OUTREACH AUDIENCES

A great deal of outreach literature in academic libraries focuses on first-year undergraduate experiences, sometimes at the expense of other campus populations. A multitude of research has explored library outreach to first-year students in experience programs (Boff and Johnson 2002), during orientation (Collins and Dodsworth 2011), and in information literacy instruction (Boyd-Byrnes and McDermott 2006). This myopic focus can cause important audiences to be overlooked, and the chapters in this section are models for broadening the scope for target audiences. In "Books Are Not Enough: Engaging

with Polytechnic Students,” Sabrina Wong discusses her efforts to meet the needs of the students at her polytechnic institution. Her plan addresses student engagement with this nontraditional population, which includes apprentice students, who have tightly planned schedules, busy lives outside of their academic classes, and a practical focus for their degrees. Rebecca Barham, Seti Keshmiripour, Lilly Ramin, and Mary Ann Venner explore graduate student engagement in “Student Library Advisory Boards: Engaging Students in the Library Experience and Communicating the Library’s Value.” Their recognition and prioritization of graduate students’ voices offers a mutually beneficial partnership for both students and librarians to improve services and resources. Finally, Deborah Lee’s strategy in “Supporting Graduate Education: Leveraging Library Workshops and Campus Partnerships” also focuses on graduate students, but her development of a foundation for outreach initiatives and organizational structure starts with a set of workshops based on different needs of graduate students. The workshop series for graduate students helps them develop research skills, eventually expanding to address gaps in other “survival” skills.

CONCLUSION

The library’s role on academic campuses is necessary and vital to the scholarly community, and we would be useless without engagement from students, faculty, and the community at large. Connecting with educational stakeholders can be a challenge, and the chapters in this volume may give you inspiration, ideas, and possibilities for future outreach projects.

One area that could be further explored is assessment in outreach. The most common way to measure a program’s success is through attendance numbers, but that never tells the whole story. Future research on assessing programs, marketing strategies, and library outreach can explore surveys, focus groups, and more in order to better understand how to improve the library’s role on campus and better connect with the community. Additionally, faculty are another audience that may benefit from additional study. While most academic libraries have liaisons that target faculty based on discipline, department, or other criteria, faculty may have needs that can be addressed with further outreach efforts.

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Part I

Strategic Vision and Planning

Chapter One

Plan, Prioritize, and Partner

A Model to Create Successful Outreach Programs and Events

Rosan Mitola

Since 2013, the University of Nevada, Las Vegas (UNLV) University Libraries have made outreach to students an organizational priority. The University Libraries stated in its 2013–2015 strategic plan the goal to collaborate with campus groups to integrate library collections and services into co-curricular educational experiences for students. The current *Libraries Strategic Framework* continues these efforts, and affirms that the library will “expand co-curricular programs to graduates and undergraduates in support of academic achievement, life skills, and lifelong learning” (UNLV University Libraries 2015, 4). When faced with aligning outreach programs and events with a library strategic plan or campus goal, it can be difficult to prioritize where to begin or expand efforts, especially when universities may have hundreds of active student organizations and many potential campus partners. In order to successfully collaborate with campus groups and determine programming for students, librarians at UNLV developed an audience-based outreach and assessment plan. Enacting the outreach plan resulted in the development of strong relationships, new collaborations with campus student services, and direct partnerships with student organizations. This chapter will explore the outreach model implemented at UNLV and will discuss the value and challenges of assessing outreach efforts.

UNLV is a large urban research university and is one of only two four-year public research institutions in the state of Nevada. In fall 2015, the university had 28,600 enrolled students with undergraduates making up 83 percent (23,801) of the head count. Most undergraduate students live off

campus and commute. Nearly 74 percent (17,575) of undergraduate students attended UNLV full-time in fall 2015, and 86 percent were Nevada residents (UNLV 2017a). UNLV is often a more affordable option for Nevada residents, and is comprised of a diverse student population. In 2012, the Department of Education designated UNLV a Minority Serving Institute (MSI) and in 2015 added the designations of Asian American and Native American, Pacific Islander–Serving Institution (AANAPISI) and Hispanic Serving Institution (HSI) (UNLV 2017b). Additionally, UNLV tied for second in the *U.S. News & World Report*'s annual listing for best “campus ethnic diversity” (UNLV 2015).

The UNLV University Libraries (hereafter referred to as the Libraries) is the only research library system in southern Nevada, and is committed to being a partner in the education and research goals of UNLV. The Libraries do so by participating in the articulation and assessment of student learning, providing direct instruction to students, collaborating with classroom faculty on course and assignment design, and intentionally creating co-curricular learning experiences. Its Research and Education Division is responsible for these activities, and two departments largely contribute to this work: the Library Liaison Program, which includes subject liaison librarians, and the Educational Initiatives Department, which contains teaching and learning librarians and an outreach librarian. With this organizational structure, co-curricular outreach is fully integrated into the educational experience and role of the library.

The outreach librarian position was new to the Libraries in 2013 and was charged with serving as the central contact with campus partners for co-curricular, residential life, and service learning in order to develop new outreach programs. For the purpose of this chapter, co-curricular outreach is defined as any student engagement and learning that takes place outside of the classroom. The outreach librarian participates in the development, provision, and assessment of the Libraries' outreach initiatives, specifically through new student orientations, outreach programs for prospective students, and events held in conjunction with campus partners. The outreach librarian also manages and coordinates the Mason Undergraduate Peer Research Coach Program, which involves hiring, training, supervising, and guiding the work of five to seven students. These students are engaged in contributing to peer-to-peer learning efforts in information literacy instruction and assist with co-curricular outreach. Additionally, this position is responsible for the Libraries' message to the campus community through the production of a quarterly e-newsletter. The Libraries' commitment to dedicating a librarian to co-curricular educational experiences was the impetus for creating a formal outreach plan.

LITERATURE REVIEW

In order to support the mission of an institution and to meet the needs of the community, outreach plans can differ widely. Most plans have elements in common, such as overarching goals or mission statements, marketing and communication approaches, strategies for involving students, collaborations with campus and/or community stakeholders, and assessment or measures of success (Love and Edwards 2009; Farrell and Mastel 2016; Smith 2011). While the style and format can vary, the 2014–2015 UNLV University Libraries Co-Curricular Outreach Plan included the following elements: background information, results from an environmental scan, target audiences (e.g., specific student populations, co-curricular student groups, campus partners and offices), and specific audience-based activities, outcomes, and potential assessment. A review of the literature and the model explained in this chapter informed the creation of a formal co-curricular outreach plan for UNLV Libraries. The literature review that follows is organized to align with the “Plan, Prioritize, and Partner” model, and includes a section about assessment. The literature on outreach plans is somewhat narrow; however, the literature on marketing and communication plans for libraries is significant and consists of case studies, strategies, and examples from academic, public, and special libraries. Recommendations on how to develop a marketing plan are valuable to consider when writing one for outreach. Best practices from the library marketing literature suggest targeting specific audiences based on the library’s strategic plan, identifying audience needs, gathering data, and determining how the library can meet their needs (Alman and Swanson 2014).

There are several ways to conduct market research and gather data for a needs assessment, including reviewing library use data and statistics; administering surveys; arranging personal interviews and focus groups; organizing secret shoppers; following up with users; polling; and analyzing data from general surveys administered to library users from an outside company, such as LibQUAL+ or Ithaka S+R (Mathews 2009). Brian Mathews emphasizes that it is important to ask the right questions and use a mix of approaches to “develop the full story” (2009, 45).

In addition to getting to know the targeted audience identified in an outreach plan, it is valuable to gather stakeholder feedback. At this stage, a librarian interested in facilitating a session with stakeholders can choose from a number of tools and techniques. Depending on the organizational culture, group size, and group dynamic, facilitators should select the tool that will best serve the purpose for the meeting. Activities that extend beyond traditional list making by brainstorming are extensive. Ralph Kliem (2014, 204) offers a comprehensive inventory of tools and techniques, including brainwriting, in which each participant writes down an idea and passes it on

to the next person for additional feedback or revision; idea bulletin boards, in which stakeholders write shared recommendations using a whiteboard or easel pad; imagineering, in which a facilitator asks each stakeholder to visualize what outreach would look like and record this vision on paper; mind mapping, which is helpful for connecting high-level concepts for planning; and nominal group technique, useful for generating and evaluating suggestions based on set criteria and providing a space for stakeholders to vote. For outreach planning that utilizes marketing approaches, braindrawing may be valuable. Braindrawing is visual brainstorming done by individuals or small groups. It results in visual concepts for icons, web design, and graphics, and it can generate designs, fill in the gaps from traditional brainstorming sessions, and works particularly well with stakeholders who may prefer nonverbal methods of solving problems (Wilson 2013).

Planning efforts should include prioritizing ideas. Nominal group technique is one way to narrow down options generated from large groups. The technique helps for additional group discussion after sharing individually generated suggestions with a group of ten to twelve participants. Participants then pick the five ideas they like the best, write them on a card or sticky note, and rank them. A facilitator tallies the votes and shares the selections with the highest scores for further discussion and ranking (Alman and Swanson 2014, 19). Kaner et al. (2014, 96) provides additional methods for arranging and picking suggestions. Straw votes, for example, offer participants a number of votes to cast on their preferred choices. This fast method emphasizes obvious items. In the “divide the list by three” technique, each participant receives a number of choices based on dividing the total options by three. After votes are distributed, the top third with the most votes becomes the new priorities. This technique is lauded as a means to ensure that the minority voice is heard. For a technique that “reflects what people actually feel and to identify unanimous preference” (Kaner et al. 2014, 96), consider offering each participant only one vote per person. All items that receive or nearly receive unanimous backing emerge as important. Lastly, it may be useful to consider multivoting when ranking many selections. Multivoting is democratic, participative, and often results in a sense of satisfaction among stakeholders (Bens 2012, 186). It varies from single voting because it provides criteria for voting, and is useful for identifying the most significant items.

Facilitative techniques can ensure group work goes smoothly. Active listening and using facilitative interventions can improve the outcome of meetings with stakeholders. Facilitators can utilize mirroring, or using identical words in a different tone from a stakeholder, to develop trust. Summarizing several thoughts can highlight relevant data systematically, while paraphrasing concisely emphasizes a participant’s thought (Hogan 2003). Other techniques offered by Christine Hogan include probing to draw out participants’ ideas or to get a group to think more deeply; utilizing sequencing to assign

multiple stakeholders a speaking order if many questions arise; and tracking everything shared aloud by taking a moment to pause, step back, and recap what was shared.

Relationships are critical to the success of an outreach or communication plan (Mathews 2009). Partnerships can result from developing deep connections with campus colleagues. Getting started can be as simple as attending a campus event to begin building rapport with other units or departments. By attending these events, librarians can personalize their communication and engage in practices such as “schmoozing” and listening (Priestner and Tilley 2012, 26–28). While the profession does not always embrace networking, outreach librarians in particular must connect with people outside of the library and develop relationships after brief interactions. It is critical to listen for colleagues’ key initiatives, projects, and undertakings while conversing with potential partners. Andy Priestner and Elizabeth Tilley (2012, 29) describe this as personalized communication and point out that this “requires agility, flexibility, and most importantly, direct contact with academics, students, and staff who are not necessarily established library users.” Meaningful library outreach efforts can include contributing to existing campus programs as a way for librarians to establish a shared understanding through face-to-face conversation.

Another concept, derived from organizational development literature by Richard Beckhard (1969, 27), is that “people support what they help create” and “people affected by a change must be allowed active participation and a sense of ownership in the planning and conduct of the change.” If “people support what they help create,” then involving campus partners, students, and other stakeholders in program creation may increase overall participation, engagement, and support from those partners. Similarly, Mathews (2009, 73) states that “by building partnerships with students instead of simply treating them as transactions, academic libraries expand their role and social significance on campus.” Librarians creating an outreach plan can benefit from considering these strategies from the literature when working to build partnerships and collaborations.

In academic libraries and higher education, where institutional priorities, budgets, and resources often are allocated based on data, it is critical that outreach efforts are assessed so that contributions and value can be evaluated through quantitative and qualitative measures. Keeping event costs per attendee low and touting popularity with students based on attendance is not enough. How can academic libraries correlate outreach programs to strategic plan initiatives or campus goals? Academic librarians immersed in co-curricular outreach initiatives are struggling to answer this question. For the Libraries, a review of the student affairs literature was particularly valuable because student affairs professionals have long advocated assessing co-cur-

ricular learning. Academic libraries can apply practices and lessons learned from these campus colleagues.

Scott Walter (2009, 92) argued the importance of assessing co-curricular programs to shed light on their contribution to teaching and learning several years ago, and suggested that “there is much that the academic library can learn from student affairs practice.” A review of the student affairs literature from the 1990s to 2001 by scholars John Schuh and M. Lee Upcraft (2001) offered practical tools for applying assessment to co-curricular learning. Student affairs professionals have long wanted to answer the question librarians often find themselves asking of those who use our services, programs, and facilities: Is there any effect on their learning, development, academic success, or other intended student learning outcomes, particularly when compared with nonusers? For academic libraries, where students utilize a wide range of library services and resources, how do we measure if co-curricular outreach efforts are a factor in influencing student success? For Schuh and Upcraft (2001, 14), “these studies are at once the most important we do yet most difficult to conduct” in order to determine effectiveness. Their research offers advice on qualitative and quantitative approaches; data collection and analysis; and measuring impact by considering usage, student needs and satisfaction, environment, and learning outcomes.

Assessing learning outcomes outside the library classroom is important, albeit challenging. The role of librarians engaged in outreach is similar to student affairs professionals, where “the job of a practitioner is to organize events around learning, and the success of the event is measured by the resulting change in students’ abilities, skills, or ways of thinking as opposed to the number of people who attended” (Borrego 2006, 14). Therefore, academic libraries must devote time in the event planning process to develop outcomes and define potential assessment. By creating and evaluating outcomes, librarians can develop a culture of assessment in this area of librarianship. For organizations getting started with assessing outreach, consider creating outcomes in alignment with a library or a university-wide strategic plan. Melissa Schivers and Sally McMillian (2013, 57) used their university-wide strategic plan to serve as a framework, which resulted in a common language for determining programs and improving communication pathways. The university-wide strategic plan also offered a structure for establishing a “full assessment cycle” along with “a clear set of outcome measures” that informed their work.

The extent of outreach assessment employed varies by academic library. A recent survey of libraries involved in exams week programming reported the ways libraries are evaluating outreach activities during finals week. However, of the 279 responses collected for this study, only 9 percent indicated using a method outside of feedback in person and on social media, number of attendees at each event, questionnaires and surveys, and number of users in

the library (Meyers-Martin and Borchard 2015). Surveys and brief questionnaires are often the selected tool for evaluating outreach events (Langer and Kubo 2015; L. Martin and W. Martin 2015; and Nicholas et al. 2015). The author of a recent case study on creating and maintaining a successful fall signature program noted in her literature review that “assessment of a special initiative or party event is generally described in number of attendees” (Anderson 2012, 57). Based on the current literature, there is an opportunity to focus on both the qualitative and quantitative assessment of outreach related to co-curricular learning. The literature indicates librarians are grappling with how to best measure and articulate the impact of outreach events, activities, and programs.

CREATING THE “PLAN, PRIORITIZE, PARTNER MODEL” AT UNLV UNIVERSITY LIBRARIES

While the outreach librarian started in her role in August 2013, the focus of the fall semester did not include completing a needs assessment or outreach plan. The outreach librarian was focused on piloting therapy dogs for students during study week, transitioning into the role of supervisor for the Mason Undergraduate Peer Research Coach Program, and maintaining the twice-a-semester newsletter to faculty and graduate students from the library. When the time came to begin considering, designing, and scaling co-curricular outreach to the campus, the outreach librarian received a dated communication plan from a previous administration as a guide and starting point, but found it was not sufficient to inform this important task. Beyond therapy dogs, there were some existing outreach programs and events already in existence, such as the Libraries’ participation in new student orientation for over four thousand new and transfer students each summer. It became apparent that a model was necessary to manage new and existing co-curricular outreach initiatives and educational experiences for students. The model is the result of collecting stakeholder input, writing a plan, prioritizing new initiatives, creating partnerships to enact events, and assessing outcomes.

The first step in creating this model was to complete a needs assessment and gather feedback from stakeholders. In order to collect stakeholder feedback, the outreach librarian and head of Educational Initiatives developed an activity to complete in a series of hour-long meetings with several groups of key stakeholders: library leadership and department managers, library faculty and staff, student employees, and current students. The goal was identical across groups—to identify and select potential undergraduate student groups to benefit from library outreach. The sessions resulted in recommended outreach initiatives with specific, assessable outcomes.

The Planning and Prioritizing Activity

In preparation for the stakeholder meetings, the outreach librarian created a log of existing outreach initiatives and affiliated campus partners. The list included the name of each outreach event, the target student population, when the program occurred, the level of library participation, and the number of students engaged. Each session with a stakeholder group began by breaking participants into four groups and presenting the goals for the day. The outreach librarian, who was the primary facilitator, shared the purpose for the series of meetings (to inform future co-curricular outreach). The outreach librarian also shared the log of existing outreach programs and highlighted specific examples. Taking the time to review existing initiatives emphasized the various forms of campus outreach that could result from these gatherings.

The facilitators assigned an audience to each group of participants. The four audiences, consisting of existing and potential campus partners, were:

1. Academic support offices (such as the Academic Success Center, academic advisors, and the Center for Academic Enrichment & Outreach);
2. Student affairs (UNLV Student Engagement and Diversity, which oversees the functional areas of registered student organizations, fraternity and sorority life, international student programs, multicultural student programs, service learning, student government, residential life, and campus programs);
3. Admissions and Recruitment (which coordinates new student orientation for prospective students); and
4. Targeted student populations that are often identified by a specific characteristic (nontraditional students, international students, transfer students, and veteran students).

The facilitators shared which audiences were not part of this process: graduate students, faculty and staff, alumni, community members, and prospective donors. For the purpose of this session, the target group was only undergraduate students. This was important to mention in the gatherings with library leaders, and library faculty and staff, as library strategic planning often targets these other audiences.

The activity was separated into two parts: planning and prioritizing. For the planning stage, each small stakeholder group identified, for their assigned campus group, any additional existing outreach, the target audience, and library point person (if known) on a large easel pad. Once existing efforts were reviewed, each group brainstormed suggestions for potential new initiatives for their assigned audience or campus partner. After ten minutes of brainstorming and discussion, the groups fleshed out the details of their ideas

by tying the potential outreach to an outcome, such as promoting a specific library collection or service, and suggesting a potential assessment for the outcome. Finally, the facilitators asked each small group to note any additional group(s) not already recognized that should be considered a priority for outreach. Each group wrote out their suggestions on a new easel pad sheet. Groups that had more than one recommendation had multiple sheets. This portion of the session lasted approximately fifteen minutes. The facilitators milled around the room to answer questions from the small groups.

Once each group was finished, they posted their work on walls around the room, and shared their concepts aloud. The result was an array of possible outreach and engagement programs for a variety of campus groups. In order to pare down the suggestions, each participant received three sticky dots to mark the top three groups they believed were the most important to develop new outreach programs for in 2014–2015. The stakeholders roamed the room and voted over the course of five minutes. After marking their choices, the facilitators tallied the dots and shared the highest scoring items. This part took approximately ten to fifteen minutes. Following the meeting, the outreach librarian transcribed the ideas and scores into a single document.

This session was repeated with the various groups of stakeholders and the results were tabulated and used to write a co-curricular audience-based outreach plan for 2014–2015. An example of one audience is excerpted from the final plan:

Audience: Academic advisors.

Activity: Provide academic advisors with key resources and services relevant for students within their colleges through a workshop or other form of delivery most desirable to advisors.

Outcome: Academic advisors connect undergraduate students with their subject librarian. Academic advisors articulate the value of librarians and our collections to students.

Potential Assessment: Track referrals, assess advisors' understanding of library resources and services, and survey advisors (UNLV 2014).

Enacting the Co-Curricular Outreach Plan

As a result of drafting and enacting a co-curricular outreach plan, the University Libraries have scaled sporadic events into an intentional, audience- and outcomes-based model. With potential audiences and activities identified, the plan has served as a road map for new engagement. All outreach follows the “plan, prioritize, and partner model,” as each library-sponsored event is conceptualized through a written proposal. The outreach librarian or other primary organizer is responsible for creating the proposal, and campus offices, student organizations, and/or internal library partners are involved throughout the proposal process.

Each proposal includes the following elements: event name, date, coordinator, background, purpose, activities, target audience, partners, outcomes, assessment/program evaluation, and estimated cost. Once drafted, the proposal is shared with internal stakeholders for feedback and review. All library event proposals are submitted for approval to the organizer's supervisor. Once approved at a department level, the division director or associate dean reviews, approves, and submits to the dean of libraries for final approval. This process plays an essential role in outlining the resources, goals, and purpose of an event. By taking the time to articulate outcomes and identifying ways to assess each event, librarians can communicate to internal and external audiences the purpose and value of the outreach. For a sample event proposal, see the appendix.

A Successful Partnership in Practice

The co-curricular outreach plan identified UNLV Student Engagement and Diversity (SED) as an important audience. SED works with several functional areas of co-curricular engagement and learning on campus. Two of these areas, multicultural programs and student organizations, were also key audiences to emerge from the planning process. To begin developing a relationship with SED, the outreach librarian worked to discover its needs and opportunities for the library to contribute to its existing programs. Through a series of face-to-face meetings with the coordinator for multicultural student programs and by getting to know the student organization that creates activities for this area, a relationship was developed and, later, a partnership was formed. The outreach librarian attended the student organization's weekly meetings and asked student leaders how they would like the library to contribute to their organization. In collaboration with the program coordinator and student leaders, a number of activities resulted. Each event served as scaffolding for the next collaboration. The first project was small; the outreach librarian shared electronic resource guides celebrating heritage months through a monthly trivia contest. The monthly trivia contest was conducted via social media. A student leader in multicultural programs posted a trivia question to his or her Facebook page along with a link to the electronic resource guide. The outreach librarian created the trivia question based on content from the guide and shared the original post on the Libraries' Facebook and Twitter accounts. Students participating in the trivia contest submitted their answer via an online form, and a winner was randomly drawn from the correct answers received. The library provided a swag bag to the winner. Multicultural programs shared a photograph of the student who won the trivia contest on social media. Additionally, the electronic resource guide was shared on the Libraries' home page.

The students enjoyed learning about multicultural collections at the Libraries and invited the outreach librarian to attend heritage month events to create a pop-up library and share these collections and resources with event attendees. From there, the outreach librarian asked multicultural programs and their students to contribute to library events. Some of the ways they participated included setting up a SED resource table, creating an activity to be a part of study week programming, co-sponsoring film discussions held in the library, and developing and leading an experiential portion of the annual event for Banned Books Week.

The benefits of having students create and lead a program were threefold: students in attendance may have felt more comfortable participating in an experiential event led by their peers, students in the registered student organization practiced facilitation and communication skills, and the library forged a partnership with a key student organization and campus department. This example emphasizes the importance of the planning, prioritizing, and partnering model. It also echoes that “people support what they help create,” and highlights co-curricular learning. The students involved in multicultural programs now come to the outreach librarian with new ideas, participate in other outreach events, and share library resources with their peers. The outreach librarian believes that future assessment will articulate how these individual events and this partnership has contributed to the Libraries’ goals of supporting academic achievement, life skills, and lifelong learning.

ASSESSMENT

Prior to creating and implementing a co-curricular outreach plan, the UNLV University Libraries did not assess outreach beyond administering basic surveys to attendees, tracking audiences targeted and the type of program offered, and counting how many participants were engaged at the event. This tactic was not adequate in measuring or articulating the contribution outreach had on participants in support of academic achievement, life skills, and lifelong learning. While it is difficult to tie a single outreach engagement directly to academic achievement, the development of a specific life skill, or lifelong learning in general, it is possible to collect information on how these efforts contribute to the student success.

Co-curricular outcome assessment of library events at UNLV has included utilizing whiteboards and large white pads to ask participants specific questions related to the activity. Most recently, by adapting a model from Scannel, Mulvihill, and Schlosser (2013), participants shared on a large whiteboard what they gained at the end of an event in four areas: feelings, knowledge, ideas, and action steps. Other techniques have included collecting copies of sheets from experiential components and reviewing student

feedback; interviewing participants informally and formally; collecting video testimonials of participant experiences; and considering student attendance to event cost. For volunteers who have assisted with providing an event, the Libraries gathered feedback about overall program effectiveness both informally and through formal questionnaires.

For the most part, by preparing in advance, outreach assessment methods have not required significant time to execute during an event. It was helpful to select an event outcome in advance to measure, and to gather supplies and volunteers to assist with data collection. For librarians just getting started, it may be useful to test out only one assessment method at an event. Afterward, time can be devoted to evaluating what worked and what might work better next time. Taking time after an event to reflect and review data collected might be more challenging to librarians than executing the method itself.

Whiteboard feedback is a great method to consider using if limited staff will be available at an event. Reflective questions can be determined in advance, and it only takes a couple of minutes to set up the feedback form on an easel pad or whiteboard. This approach requires no mediation during the event, although library staff can encourage attendees to participate. When the Libraries collected video testimonials or interviewed participants, more preparation has been necessary. Video testimonials require finding a space for filming, testing video and microphone equipment, and selecting a library student employee or staff member with the interest and ability to assist with this project. Most recently, the Libraries collected video testimonials throughout a two-day Human Library event and, over the course of six hours, recorded feedback from fifteen participants. Two student employees received training to solicit and collect video comments. Participants that declined the Libraries' request to be recorded were encouraged to contribute their feedback on a whiteboard placed in the same space. While only fifteen videos were recorded, more than sixty written comments were collected.

The Libraries have deployed various whiteboard assessment techniques, along with tracking attendance, at nearly every outreach event hosted inside the main library. The Libraries have frequently experimented with the aforementioned additional techniques. Students were more inclined to submit their written feedback or turn in a copy of their completed activity if they received entry into a drawing for a swag bag. Giving away Libraries-branded water bottles, notepads, or other items make it easy to encourage participation.

The outreach librarian shares collected data with library administrators and stakeholders as a way to articulate the contributions these events and programs make to students. Additionally, the outreach librarian anticipates using the data as a way to contextualize how these activities contribute to co-curricular student learning. At the end of the 2014–2015 Co-Curricular Outreach Plan, individual event assessment will be reviewed in aggregate and will inform the next planning process.

CONCLUSION

Developing a process for planning, prioritizing, and partnering can strengthen future outreach efforts for libraries of all sizes, especially if input and feedback from stakeholders is included. In addition to the wealth of ideas and connections that library and campus stakeholders offer, the process can result in increased buy-in and ownership from participants. Moreover, successful campus outreach programs often are the result of strong relationships that grow into partnerships. Academic libraries can increase the extent of their campus outreach through collaborations with campus colleagues and student organizations. It is also important to consider organizational goals and directions for both creating and assessing outreach. Whenever possible, evaluate and assess outreach programs individually, as each event is unique and has its own outcomes. Fortunately, there is a range of qualitative and quantitative assessment methods that academic libraries can employ. By assessing individual programs within an outreach plan, data gathered can inform overall campus outreach success, and can be a useful tool for articulating the value and impact of these efforts while also informing future efforts.

APPENDIX: SAMPLE EVENT PROPOSAL

Event name: Panel Discussion—Protecting and Preserving LGBT History in Las Vegas

Proposed Date, Time, and Location: Thursday, October 1, 2015, 4–6 p.m.

Event purpose: To provide a historical context of the LGBTQ experience in Las Vegas and Southern Nevada and highlight UNLV University Libraries' unique Special Collections to the UNLV students, faculty, and staff; Clark County School District (CCSD) high school students; and local Las Vegas community members. This event falls on the first day of "LGTBQ Pride Month" on campus, as observed and celebrated by the Office of Student Engagement and Diversity.

Activities: The primary event focus will be a panel discussion with LGBTQ longtime advocates from the Las Vegas Community, moderated by the head of Special Collections public services. LGBTQ items from Special Collections will be on display. The panel will offer attendees an opportunity to ask questions and discuss key topics.

Outreach librarian and head of Curriculum Materials Library will collaborate with the UNLV Student Engagement and Diversity office, UNLV Spectrum (the undergraduate LGBTQ organization), The Center (serving the LGBTQ Community of Nevada), and the American Civil Liberties Union of Nevada to attend and provide resources and information to event attendees

before and after the presentation. A small LGBTQ book tasting table will be available for participants to peruse before and after the presentation as well.

Event target audience: The events will be open to all UNLV students, faculty, and staff as well as interested community members; however, emphasis will be placed on encouraging the UNLV LGBTQ community and CCSD Gay Straight Alliance members to attend. Other key students include affiliated members of the Office of Student Engagement and Diversity and UNLV Spectrum.

Event outcomes:

- Participants will engage with library faculty, staff, and community members in order to recognize the University Libraries as a campus partner and ally by providing an inclusive environment for all student populations.
- LGBTQ UNLV students will be exposed to LGBTQ materials in the University Libraries' Special Collections in order to utilize library resources in future curricular and co-curricular learning.
- High school participants will engage with UNLV students, faculty, staff, and presenters in order to experience a university environment and understand the importance of co-curricular learning opportunities.

Cost: If event is approved, costs include print materials to promote the event, catered refreshments, and campus photography.

Assessment/program evaluation: Reaction cards will be collected to assess student understanding and personal reactions to the presented issues. In lieu of tracking specific students in attendance by swiping their student identification cards, event organizers will keep track of how many UNLV students, faculty and staff, and local high school students attended the event.

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Chapter Two

Reconceptualizing Outreach

Leveraging Librarians' Knowledge and Curiosity to Enhance Collaboration

Rochelle Smith

Outreach in academic libraries is largely seen as a means of sharing “librarian expertise regarding concepts and skills associated with the location, use, and management of information” with the academic community (Kraemer, Keyse, and Lombardo 2003, 8). And academic librarians have rightly advocated for greater collaboration with university teaching faculty (Smith and Dailey 2013; Tucci 2011) as they champion the benefits of the information literacy skills they bring to the curriculum. But this chapter points out that librarians harbor a wealth of knowledge to share beyond information literacy, and that outreach by academic librarians can encompass much more. Librarians at their best display an intellectual curiosity and agility that can serve as an invaluable model to students. Room exists in the current academic environment for librarians to engage with students about primary, subject knowledge on Oceanic art or French literature or ecology or Islamic history, in fields as diverse as their educational backgrounds and interests. Librarians are, in fact, well placed to share the range of their knowledge and their approach to learning, partnering with teaching faculty and enhancing the sense of what libraries and librarians bring to the intellectual life of the campus.

This kind of partnering looks beyond standard approaches to embedded librarianship. The practice of embedded librarianship involves moving subject librarians out of the library and getting them into closer interactions with the colleges and departments they serve, and has led to such innovative programs as a music historiography assignment jointly created by the music

librarian and a music professor at Chapman University in Orange, California (Stone and Sternfeld 2014, 28), and a four-year-long collaboration between librarians and chemistry faculty at The College of New Jersey that resulted in the creation of the Chemistry Seminar Program (Tucci 2011, 295). Yet even the strongest advocates of this type of collaboration tend to emphasize teaching research *process*, providing instruction on information literacy, or assisting faculty with research assignment design (McCluskey 2013, 5; Polger and Okamoto 2010, 2; Meulemans and Carr 2013, 82). What will be discussed in this chapter is a broadening of this role, reconceptualizing outreach and engagement more informally by exploring different types of partnerships with faculty, modeling curiosity for students, and allowing librarians to shine both as “multidisciplinary experts” (Fonseca 2009, 84) and as fellow knowledge seekers.

MODELING CURIOSITY, CULTIVATING AMATEURSHIP

Curiosity is widely regarded as an indispensable characteristic of lifelong learners. According to Kathleen Fisher (2000, 32), curiosity is “a relentless inquisitiveness about the world around and beyond us, a continual scrutiny and questioning of experience.” She sees it as “one of the most valuable capacities we can foster in our students” (29). Keston Fulcher (2008, 7) posits a strong connection between curiosity and a capacity for lifelong learning, and suggests that fostering such learners is one of the central goals of higher education.

Curiosity is a trait that librarians ideally demonstrate to students all the time, in reference transactions and research sessions (Deitering and Rempel 2017; Yu 2017). Interactions at the reference desk require agile movement from question to question, and working with students in a bibliographic instruction session on keyword generation or concept mapping demands no less. However, curiosity and intellectual agility are not just useful incidental traits possessed by many librarians: they can be put to use directly in modeling habits of mind, such as curiosity, to students.

Given the structure of much classroom teaching, it is easy for students to see their professors as experts already in possession of all the answers, rather than as fellow seekers and learners. But librarians, long-standing generalists who enthusiastically make connections between disparate ideas and approaches, are uniquely placed to enact the role they want students to play: engaged and excited inquirers who are exploring and connecting concepts. Modeling inquiry for students is invaluable, especially for traditional-aged undergraduates, many of whom are just finding their feet in the world of ideas. Students can experience moments of tremendous power when they realize that topics of interest to them, whether samurai armor or Viking long

ships or tattoos, are worthy of scholarly interest, and that *any* topic can be investigated in an academic way. Librarians often lament that students don't see them as teachers or experts (Polger and Okamoto 2010). But we can turn this perception of ourselves as newcomers to a subject to our advantage and show students the way to engagement and empowerment. Each time we assist a student with a research topic, we re-create the student's own experience of facing a question with no answer ready at hand, and with no path mapped out. Each time a student observes how the librarian's own curiosity and intellectual flexibility lead organically to answers and to new, deeper questions, they learn that it is possible to do this themselves. They learn that curiosity is a key component of research and essential in finding doors that might exist in what had initially appeared to be blank, immovable walls.

An intriguing partnership that highlights the potential of leading with curiosity and a desire to learn was undertaken by library staff at Florida Atlantic University (FAU) and the Taras Oceanographic Foundation (Arrieta, Brunnick, and Plocharczyk 2015, 83). This collaboration involved two initiatives: a project on marine mammal stranding and one on dolphin spotting. In both cases "the campus librarian was a consistent team member" (89). The first project called for volunteers to undergo training in stranded cetacean rescue on the southeast Florida coast. Librarians, university faculty, students from FAU and other universities, local high school students, and community members took part in the training, much of which was held in the library. Project goals included "enhancing the students' educational experience and . . . allowing them to gain experience in marine science," and "connecting the students with a locally based scientific organization" (85), as well as advancing science literacy across the board and building a strong library relationship with the Foundation.

In the second initiative, the Palm Beach Dolphin Project, participants acted as dolphin spotters and data collectors for populations of two dolphin species. Library staff members, including FAU's science librarian, worked as part of this team aboard a research vessel and in the laboratory. The continuing aim of this project was "to promote community involvement and science literacy related to cetacean biology and the environment [and to] strengthen the partnership between [the library and the Foundation] and inspire students with new research opportunities" (Arrieta, Brunnick, and Plocharczyk 2015, 88). The science librarian, who presented on these projects at the 2015 Library Research Seminar at the University of Illinois, spoke of her inexperience at the start of the projects: she had a humanities background, with no prior training in oceanography. She found her status as a beginner in the realm of citizen science was encouraging to participating students as well as to fellow library staff, and helped to create a safe atmosphere for the acquisition of unfamiliar new skills.

Auditing classes is another way for a librarian relatively new to a subject area to make inroads in relationship building. According to Jennifer Pollock (2009, 23), auditing art history classes proved invaluable to her work as an art librarian. In taking classes in British art history, one of her liaison areas, at Yale University, she significantly increased her subject knowledge. But just as importantly, as “a librarian who shared their experience” (24), she was able to relate to students in a deeper way, becoming enough a part of their daily academic world that they naturally turned to her with research questions as the semester progressed. And she ultimately expanded her role by teaming with the professor to create an art history geotagging assignment for the following semester.

Even in the course of standard duties, librarians can be open to chances to interact with students and classes in new ways. My ties to the University of Idaho’s (UI) English department, to which I am liaison (and from which I received an MFA), have led to opportunities to give subject-based guest lectures for teaching faculty. Although more will be said about such seemingly serendipitous opportunities arising through professional or community connections later in this chapter, one specific story here will touch on the area of amateur knowledge. A UI literature professor, who found himself with a conference commitment that would take him away from campus, approached me about visiting his 300-level Shakespeare class, not to conduct a standard overview of search tools and strategies, but to lead a discussion of *Hamlet*. (I had taken a graduate Shakespeare class from him years earlier, had purchased many materials on Shakespeare for the library at his request, and was known by him to be an enthusiast.) On the day of the class I facilitated a conversation touching on Catholicism, Protestantism, regicide, grief, filial loyalty, and other themes within the play. The students, some of whom had read *Hamlet* in high school and some of whom were new to the text, participated enthusiastically, and feedback from the session was quite positive.

What is key about this story is that I am by no means a Shakespeare scholar, but rather a passionate amateur, a Shakespeare nerd, if you will, who comes to the topic with inquisitiveness and enthusiasm, even as a relative beginner. This may on the surface seem a disadvantage in a guest lecturer but, in fact, this amateurship provides something invaluable—a model for the role we want our undergraduate students to play in their own academic lives. In a guest lecture a librarian can go beyond better promoting library *services*, as is done in traditional information literacy sessions (Arrieta, Brunnick, and Plocharczyk 2015, 81), to modeling how to approach and think about concepts, connections, and ideas as a scholar (Hensley 2004, 32)—and, crucially, as a scholar who, like the students, is at the beginning of her research journey with a topic rather than as an expert who has already devoted years of her academic life to mastering a discipline. It is one thing to practice the

virtue of curiosity, so necessary to lifelong learning and to innovative thinking (Milkova et al. 2013; Fisher 2000) with years or decades of experience under one's belt. It is quite another to be a relative novice, facing an expert in the classroom who also, not insignificantly, controls your grade. Librarians' ability to inhabit the role of curious amateurs can provide students a window into the process of engaging with new ideas in a way that few other members of the university faculty and staff can do.

WHAT DO LIBRARIANS KNOW?

Moving beyond the realm of the amateur, librarians can and do play many roles in a college environment: research consultant, curricular advisor, mentor, and more. So it is worth considering, especially since many librarians come to librarianship with other academic degrees and experience (or gain these while in the profession), that partnering with teaching faculty is a viable and valuable option.

There is precedent for this approach in special collections and archives departments, in which librarian and archivist outreach involves discussing *content* as much as *access*. *Past or Portal? Enhancing Undergraduate Learning through Special Collections and Archives* (Mitchell, Selden, and Taraba 2012) provides dozens of examples of archivists and special collections librarians doing just this: working with students on oral history, archaeology, medieval history, and other topics and, in so doing, going well beyond the confines of traditional bibliographic instruction. The book is an inspiring collection of best practices, from the architectural studies course developed jointly by an art professor and an archivist at Connecticut College (Seals 2012), to the integration of primary sources by special collections librarians into music and experimental psychology classes at Stockton, California's University of the Pacific (Sutton 2012). In one example, Megan Mulder from Wake Forest University in Winston-Salem was an active participant and sometime co-lecturer, as well as embedded special collections librarian, in that institution's undergraduate Renaissance Poetry seminar. She saw her primary role over the course of the semester as "not to teach research *methods* [my emphasis], but to provide and interpret the material objects which illustrated central concepts presented in class" (Mulder and Jones 2012, 72).

In contrast, library liaisons outside special collections departments are largely called on *only* to share information gathering and evaluation methods, a task which, while essential, renders the librarian's subject knowledge largely invisible to students and teaching faculty. There has been some study of the detrimental effects that downplaying our subject knowledge has on the way librarians are viewed: to quote an undergraduate respondent to a 2010 study on student perceptions of librarians at CUNY, "I don't think [librar-

ians] know a particular subject well . . . but they can help or guide you in the right direction so you can inform yourself” (Polger and Okamoto 2010, 2–10, 7). The concept of collaborative teaching between teachers and librarians, common in K–12 education (e.g., Carmichael 2009), virtually disappears from library literature in a college or university setting. We are adept at helping students find sources, but outlets to share knowledge directly and to inspire students about the ideas contained *within* those sources are still needed.

Anthony Fonseca’s (2009, 84) strongly worded call for greater librarian involvement in faculty collaborations declares, “librarians bring more than just research skills to academe. They bring subject specialties and often teaching experience, and these combinations can greatly benefit students.” As Polger and Okamoto assert (2010, 2), “Many librarians hold second Master’s degrees and have strong subject expertise so they can enhance student learning with their subject knowledge.” At my institution, the University of Idaho, the modest-sized library faculty includes a former practicing attorney, a composer with an MFA in music, a master’s-level specialist in the history of women in the West, and two published poets. Yet despite many librarians’ interests and grounding in a wide range of subject fields, we are seldom tapped to share what we know about those fields. That knowledge is thus rendered invisible, and the expertise gathered over the course of attaining a bachelor’s or a post-graduate degree seldom sees the light of day, whether in teaching, research, or outreach. When librarians do talk about sharing their own scholarly inquiry with the university community, it is most often their research in information literacy or other aspects of professional librarianship (see McCluskey 2013), perhaps not the most captivating topic to faculty or students outside that field. In terms of capturing the interest of the larger community, what *about* law, history, music, literature? What can librarians share in terms of subject knowledge beyond collection development?

As academic librarians are increasingly expected to effect change beyond the walls of the library by actively engaging with the community (Covone and Lamm 2010), it may be time to take advantage of the full range of our scholarship and abilities. Interdisciplinary colloquia and subject-based guest lectures present largely untapped opportunities to move beyond the areas in which librarians are usually seen as having expertise, giving students and the university community at large the opportunity to experience librarians as full partners in intellectual curiosity and research excellence.

The University of Idaho created the Malcolm M. Renfrew Interdisciplinary Colloquium series in 2001, with a mission to “expose the university community to a variety of disciplines on campus and initiate conversations about those disciplines, conversations that could encourage interdisciplinary cooperation” (University of Idaho 2016). The colloquium series comprises midday lectures by university faculty, sometimes a single faculty member

expounding on work that crosses disciplines, sometimes two or more faculty members from different disciplines working together to present a joint talk. Sample joint lectures include “Useful Fictions: Mathematics, Literature and Pedagogy” (2013), given by a professor of English and a professor of mathematics; and “Schitsu’umsh ł sqigwts: A 3D Approach to Indigenous Knowledge and Climate Change” (2015), presented by a professor in sociology/anthropology and an instructor in virtual technology and design. Examples of single-lecturer talks include “Self-Confidence, Stardom and Post-Racial Culture” and “Religious Struggle in the Cantatas of Johann Sebastian Bach” (2015), presented by individual faculty members in journalism and mass media in the first case, and music in the second. Over the course of a given year, as the series moves through topics from theater to fisheries management to architecture to computer science, students, many of whom are required to attend for course credit, are given a glimpse into the world of academia beyond classroom learning. Such experiences show them the possibilities and rewards of moving outside their subject silos (Milkova et al. 2013, 696).

UI librarians have on several occasions taken advantage of this forum, which is available to all faculty. In 2011 the library’s head of Special Collections presented a colloquium concerning magic and its fellow occult sciences in the early modern world, a topic that grew out of his doctoral research. He treated the talk as part of his standard work, a form of outreach that would put him in contact with users who might never cross his path in Special Collections. Such outreach efforts, if they capitalize on existing interests and research directions, can be more enjoyable than burdensome. Recently, one of the UI instruction librarians, a self-taught expert on Sherlockiana, gave a colloquium talk titled “The Case of the Baker Street Journal: Investigating Scholarship beyond Academia,” which interestingly tackled the subject of amateur, in this case literary, scholarship.

I was the first faculty member from the library to participate in the Renew series, and have done so three times. On the first occasion, I co-presented a colloquium lecture titled “The Return of Do-It-Yourself in the U.S.: Food and Craft in the New Millennium” in the spring of 2010, with a colleague from the English department. She focused on the phenomenon of urban foraging, while I discussed “upcycling” as a phenomenon reflecting renewed current interest in contemporary crafts and sustainability. My portion of the talk grew out of work on an article that looked at trends in publishing craft books during the 1960s and early 1970s and compared them to the boom in DIY publishing that has occurred since the turn of the millennium (Smith 2010). As with my guest lecture on *Hamlet*, my talk was an outgrowth of a personal, amateur interest in craft, rather than from sustained formal study of the topic. My co-presenter likewise has an academic background in rhetoric and English pedagogy rather than American foodways or

any other branch of social science: her interest in foraging grew out of her lived experience. Giving this talk led to other opportunities to collaborate: we went on to co-present at a panel during the Rhetoric Society of America's 2010 conference in Minneapolis. As a result of this presentation, it became easier for other English faculty to view me, and other librarians, as potential partners in scholarly endeavors (Fonseca 2009, 85). Presentations that are open to the entire campus community benefit librarians *and* teaching faculty, both in terms of building their vitae, and in terms of increasing visibility and thus further opportunities for joint outreach. After all, departmental faculty can find themselves siloed in their presumed areas of expertise just as easily as librarians, and may welcome the opportunity for contact with students and colleagues beyond their own subject areas.

In 2013, I co-presented a second Renfrew Interdisciplinary Colloquium lecture, "Dilemmas of Classification: What Counts as Art?" with the art and architecture liaison, who is a fellow UI reference and instruction librarian. Another outgrowth of an article, this lecture focused on the separation of the art and craft subject areas in Library of Congress classification, linking it to attitudes toward the arts prevalent in the late nineteenth century when the scheme was created. This talk was more focused on a library-related topic than the previous one, but its close connection to the audience's everyday experience of art and of craft—and its copiously illustrated accompanying slide presentation, predominantly comprised of images of artwork and photographs—ensured it was well received.

Most recently, I teamed with a mathematics professor to present a talk titled "Playing with Fire: Handling Double Binds" as part of the fall 2017 colloquium series. In it we discussed paradox in the realms of mathematics, religion, mythology, and ethics, touching on infinity, moral dilemmas concerning hunting in traditional societies, and the nature of fire itself. These talks have been deeply enjoyable to present, and offer a low-stakes way to explore topics beyond librarianship. They also allow me to partner with faculty outside the library, building relationships founded on collaboration and mutual intellectual engagement rather than service. And they give undergraduates an inroad into conversations with me about the subject discussed, breaking the ice and ensuring that I am not a stranger when the time they require research help arrives. Librarians have discussed this as a benefit of embedded librarianship (Reale 2016, 30); talks like the ones described above provide many of the same benefits but in a looser, more informal, and pleasurable way. Pleasure and camaraderie should not be underestimated in the building of the kind of relationships that any outreach effort seeks to do.

CREATING OUR OWN OPPORTUNITIES

The Renfrew Interdisciplinary Colloquium series provides an excellent avenue for fulfilling the requirement for outreach that is part of the evaluation process for all faculty at the University of Idaho. However, university-wide interdisciplinary colloquia like the Renfrew series do not seem to be widespread in the United States. Libraries do not need to wait for a university-wide initiative, however—they can take matters into their own hands. The UI Library has begun hosting an *in-house* colloquium series. In addition to class-based information literacy sessions, the UI Library has a long history of presenting skills-based drop-in workshops on new databases, citation management tools, search strategies, and approaches to creating library or research-based assignments. However, the in-house colloquium series is quite different. Begun in 2013, its mission is to bring together UI librarians and faculty researchers from other disciplines in collaborative discussions of shared research interests. The talks are held in the library's public first-floor space at midday, and offer an unparalleled opportunity for UI librarians and teaching faculty to share knowledge with the university community and with interested members of the public. The library series is, by its nature, more closely bound to the discussion of approaches to research than the Renfrew series, but only in the broadest sense. The head of Special Collections co-presented with a member of the music faculty on John Coltrane's improvisational style, using the library's extensive jazz archives as a starting point. The library liaison to the College of Natural Resources staged a talk with on-campus and Extension faculty members on the vital role citizen scientists play in the gathering of ecological data.

My foray into this series involved pairing with a member of the UI theater department, one of my liaison areas. The professor was staging *Twelfth Night* and was open to the idea of partnering to give a talk in the library on the work that goes into staging a Shakespeare production in a campus setting. This colloquium largely took the form of a Q&A session, in which I interviewed the professor, touching on topics ranging from stage combat (he brought swords) to the continuing relevance of Shakespeare to modern audiences. The interview-style session worked well, allowing for amateur/expert interplay as we discussed choices in terms of setting and costume, how plays are edited for stage performance, the dilemmas women face in times of civil war, comedy versus tragedy, and being a Shakespeare practitioner versus a scholar. Colloquium talks have been a welcome addition to both our curricula vitae, and presenting has been beneficial for us as well as for the audience, a fact that is important to stress as all faculty are ever more thinly stretched.

SOMETIMES IT'S WHO YOU KNOW

Colloquia provide a valuable means of reaching out and engaging with the university community about content, rather than exclusively foregrounding our utility as finders and housers of information. And they readily capitalize on pre-existing work. The *Twelfth Night* library colloquium came into being because of my ongoing relationship with a liaison department and its disciplinary faculty, as did most of the other talks cited in this chapter; it also strengthened and furthered that liaison work, an essential part of my outreach responsibilities. Similarly, guest lectureship, another option that can enable librarians to highlight their non-LIS knowledge as discussed earlier, can grow out of a strong liaison relationship with department faculty, especially if that department's subject areas link with one's own educational background; this can afford many opportunities to foster broader engagement with students.

I serve as liaison to five departments within the College of Letters, Arts, and Social Sciences at UI—history, English, theater, modern languages, and philosophy—and have conducted information literacy/library skills sessions for classes in all these departments. A second guest lecturer opportunity was quite different. The chair of the history department teaches a 200-level course, “The Historian’s Craft,” which introduces students to methodologies used by historians. When she requested that the history librarian meet with her class, it was natural to assume that she wanted a standard session on discovery tools and history databases, but that was not the case. In a prior conversation, we had spoken about the research project that had been the subject of my second Renfrew colloquium talk: the placement of art and craft in the Library of Congress Classification system (LCC). She decided that she wanted her class to hear about my own research, as an illustration of how to approach a history topic, in this case the use of the LCC as a primary source in the investigation of political, social, and aesthetic concerns during its period of creation, the late nineteenth century. This class session highlighted library classification systems, including Dewey Decimal Classification as well as LCC, as primary sources available to history researchers. It featured a PowerPoint presentation largely made up of images—Limoges and Ming vases; Hopi pottery; the Sistine Chapel ceiling; 1970s crocheted ponchos—calling into question the shifting definitions of art and craft in American culture over the past century, and the way those definitions were frozen in time by different library classification systems. It proved an exhilarating change of pace from the usual information literacy session for the students and for me, the researcher and presenter. More importantly, the professor has repeatedly requested this session, as has another history professor, and both report that their students’ library use spikes significantly after these talks. The students seemed to gain a sense of the librarian as a partner in seeking

and formulating new knowledge, based on observation and analysis of those systems that familiarity easily renders invisible.

CONCLUSION

In this chapter, I have offered a reconceptualization of outreach that includes opportunities for librarians to share both what they know (as experts) and how they think (as curious amateurs). These can include:

- Participating in university colloquium, symposium, or research seminar series, ideally partnering with faculty outside the library.
- Starting a library colloquium series, in which liaisons and other librarians can partner with teaching faculty on presentations.
- Serving on thesis committees, whether for graduate students or senior honors candidates. Students are often required to secure third readers from outside their departments, and librarians with faculty status are eligible and in fact invaluable.
- Auditing classes within one of your library liaison areas or beyond. This broadens subject knowledge, builds relationships with students and faculty, increases library visibility and, as in Pollock's (2009) experience, presents opportunities to collaborate with teaching faculty in more in-depth ways.
- Participating in citizen science projects connected with the university. This is an especially useful strategy for librarians who serve as liaisons to science departments, whether or not they have a science background.
- Leading book talks and participating in other events connected with university common reading programs, and serving on the committees that choose the titles. In my experience, librarians can sometimes have a keener sense of what will be a rewarding read for first-year students than teaching faculty.
- Volunteering to serve as a judge for student projects and competitions. Fonseca (2009, 88) suggests "serving as faculty advisor to student organizations, or as organizers of events that combine student learning with socialization."

Fonseca (2009, 88) also recommends participation in such activities as "theatrical productions by the drama department, voice and ensemble recitals by music departments, and periodic research seminars" as a way to "discover shared interests" and build relationships with teaching faculty.

Outreach is meant to increase the visibility of the academic library, and it would be ironic if that increased visibility served only to reinforce narrow ideas that the academic community often already holds about what librarians

“are good for.” But this is not inevitable. Opportunities for academic libraries and librarians to participate in the cultural conversations taking place on and off campus are plentiful. What ties the stories in this chapter together is an openness to and pleasure in learning and in sharing knowledge. In the examples given, at FAU, UI, and elsewhere, the opportunities for outreach were at least somewhat serendipitous; by looking out for such opportunities, and by allowing ourselves to be open to possibilities, we will find that we have much that is valuable and untapped to contribute to our library, the university, and the community beyond. Librarians are making strong connections every day in big and small ways, from going on field trips and participating in service learning breaks to coming up with examples in standard classroom information literacy sessions that pique student fascination and give glimpses into lively minds at work. Expanding the practice of academic librarianship in these ways shows students, faculty, and our communities that librarians’ knowledge and intellectual engagement are an integral part of what is best about higher education.

ACKNOWLEDGMENTS

The author would like to thank Jim Snyder and Sarah VanGundy for their help in editing this chapter, which was invaluable and greatly appreciated.

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Chapter Three

Teaching to Learn and Learning to Teach

Using Theoretical Models to Plan Outreach to Student Peer-mentoring Programs

Courtney Lundrigan

Information literacy and lifelong learning require librarians to become educators, to create learning environments in which the emphasis is on student learning and not simply on the teaching of skills. (Deese-Roberts and Keating 2000, 10)

Traditionally, academic librarians have sought instructional partnerships almost exclusively with faculty members and course instructors. Students can often be overlooked as direct collaborators in instruction, with the exception of graduate student course instructors and teaching assistants. Even this population consists largely of graduate students, aside from the occasional undergraduate teaching assistant. In addition, librarians concentrate the majority of their efforts in making connections in the classroom through courses, academic programs, and other formalized curricula. These are fruitful connections, and should continue to grow, but librarians would benefit from considering other stakeholders in undergraduate student instruction and support, including the students themselves.

Outside of class, many students belong to extracurricular groups (hereafter referred to as student associations). These groups are usually organized and governed by their student members, with the occasional assistance of a faculty sponsor or liaison, where applicable, although this practice varies by institution. Student associations bring together college and university students based on a shared demographic factor or other common interest.

Cohesive campus populations such as student associations are a perfect example of potential library instruction stakeholders that are often overlooked. They have many desirable characteristics as a group, including voluntary participation/membership and student-centered programming and initiatives. Groups that self-organize based on demographic factors or academic disciplines have specific information needs, similar to those addressed by librarians at the course and program level. Unlike student cohorts that exist in courses, programs, and disciplines, students participate in associations on an entirely voluntary basis, so any information literacy engagement and outreach must be personally meaningful to attract attendees and add value beyond the classroom.

Collaborating with or contributing to existing programming is one strategy librarians can use to engage with student associations. In particular, groups that offer their members mentoring programs provide an excellent opportunity because of their emphasis on building peer relationships. Most post-secondary mentoring programs provide participants with a one-to-one or small-group experience. Mentoring programs present an even more specialized set of information needs for which librarians can provide their expertise.

A librarian's role in outreach to student associations can be difficult to articulate, especially when contributing to existing programming where goals have likely already been stated and planning has begun. Librarians may face challenges in finding their purpose or demonstrating their full collaborative potential. Similarly, coordinators of student organizations may find it difficult to define what they think a librarian's role should be in their programs. The same challenge impacts a librarian's outreach and engagement with students and instructors in a particular discipline or program, where learning goals have already been set. Despite this challenge, librarians have long found fruitful ways to partner with instructors and have much to contribute to collaborative information literacy initiatives, regardless of the stage of the planning process.

While evaluation and assessment of outreach initiatives with student associations are crucial to determining their success and impact, librarians should begin by considering the theoretical underpinnings of their efforts. Both are critical pieces for success, but focusing first on developing a theoretical framework can facilitate the planning for and, ultimately, the evaluation and assessment of, outreach programming.

This chapter will examine a number of peer tutoring and mentoring theories and how they can be applied to student associations. The synthesized theories can be used as a framework for librarians reaching out to such groups to provide information literacy instruction. I will then discuss how this framework informed outreach to a peer-mentoring program offered through a student association at the University of Toronto, and provide rec-

ommendations for librarians who may be considering similar outreach initiatives.

LITERATURE REVIEW

The literature on library connections with peer mentoring is scant. Scholars in a range of disciplines have been engaged with peer-centered approaches to learning for decades, but few have explored the impact in the context of libraries and information literacy. Furthermore, the education and psychology literatures draw marked distinctions between various types of peer-centered learning approaches, such as peer-assisted learning (Bodemer 2014), peer tutoring, and peer mentoring (Colvin 2015). Each of these approaches has value for student association outreach strategies, so it is important to consider each of them individually and how they apply to outreach to student associations. First, understanding the characteristics, motivations, and behaviors of particular student populations will help determine which education and psychology theories can provide the best lens for planning library outreach to student associations and their existing peer mentoring programs.

Adult Learning

While adult learning theories, such as andragogy, are not often applied to traditional undergraduate student learning, certain parallels lend themselves to the study of student associations. Malcolm Knowles' analyses have been the cornerstone of the adult learning literature for decades, and he has built on his Adult Learning Theory over the years (Knowles 1984). Although he focuses largely on human resources development, he has applied his theory to a number of areas of higher education, especially to adults returning to post-secondary education and how they learn with their younger peers.

Building on the early twentieth-century idea that adult education is student centered, Knowles developed a model for understanding adult learners that is applicable to college and university students who take on mentoring roles. Knowles believes adult learners are first and foremost self-motivated, and are ready to learn. They possess an understanding of themselves that facilitates decision making, and they take responsibility for their own learning. Ultimately, they have more life experience than many other types of learners, which drives their learning experience. This, in turn, makes many adult learners inclined to seek out learning experiences that will help them solve problems similar to those they encounter in their daily lives (Knowles 1984, 55–61).

Many of these attributes are also characteristic of peer mentors, who are inclined to take on roles that help solve problems encountered in daily student life, such as connecting students with information and services (Colvin

2015). They are more experienced in campus life than their mentees, putting them in a better position to advise on decision making. Like Knowles's ideas about adult learners, their perspectives and beliefs about learning impact their teaching practice and theory, where applicable (Knowles 1984, 64). Student peer-mentoring participants (both mentors and mentees) do not fit easily into the age and life experience demographic put forth in Knowles's theory, but they do possess many characteristics of adult learners. The similarities between adult learners and those who seek out additional, optional learning experiences help make a case for applying Knowles's theory to situations outside of traditional adult learning. For the purposes of considering student associations, peer mentors often exhibit behaviors of adult learners.

Peer Learning in Higher Education

In addition to considering adult learning theories, librarians also need to examine peer-learning research. As early as 1966, scholars considered the role of peer groups in augmenting a number of post-secondary services and initiatives. Theodore Newcomb (1966) conducted an extensive study on how peer groups can be leveraged to improve various aspects of the college experience. Many things have changed since then about the post-secondary experience, but some of Newcomb's fundamental findings are crucial to understanding the role of peer groups in post-secondary education. He asserted that common interests often bring people together, and peer groups based on those common interests are the most influential in post-secondary education (Newcomb 1966, 9). As peer connections have a greater impact than classroom connections, peer-mentoring groups are a logical place for librarians to reach out to provide information literacy instruction.

Aside from Newcomb, psychologists Jean Piaget (1970) and Lev Vygotsky (1986) pioneered constructivist and social constructivist approaches to peer learning that are highly influential and still referenced in most of the peer-learning literature today. Both Piaget and Vygotsky are often the first names associated with any academic studies on peer learning, and their theories are often the cornerstones that others built on in subsequent decades. For the purposes of library outreach to student associations, Piaget's ideas about the importance of peer groups in fostering critical thinking and engagement are the most relevant. In particular, Nancy Falchickov emphasizes Piaget's conclusion that "co-operation between peers is likely to encourage real exchange of thought and discussion," and is "essential for the development of a critical attitude of mind" (Falchickov 2001, 3). Applying Piaget's theory to the librarian's emphasis on critical thinking in instruction, peer groups such as student associations can become an essential piece of the library's student engagement efforts. Student association mentoring groups particularly fit

into this category, as most involve a relationship where mentees are gaining knowledge and ideas from their mentors.

There is a comprehensive literature focused on further breaking down the structure found within peer groups and how it influences peer interaction in tutoring and mentoring scenarios. Falchickov's 2001 book, *Learning Together: Peer Tutoring in Higher Education*, contains a succinct discussion of the literature about the various types of peer relationships, ranging from near-peers (who have higher knowledge) described by Whitman and Fife (1988) to co-peers (who are on the same level) (Falchickov 2001, 1). Falchickov (2001, 8) posited that there is a difference between peer relationships at the same institution and those across institutions, as well as a different relationship between peers at various stages of their academic career. This is an important articulation when discussing mentoring programs, as many are based on such differences.

In post-secondary mentoring programs, the most common pairing is between upper-year and lower-year students, a convention often preserved in student associations. According to Falchickov's (2001, 8) analysis, this type of tutoring relationship is a cross-level peer interaction with students from the same institution, but not in the same class or year. The most important element of cross-level peer engagement is a gap between the experience levels of the tutor and those of the tutee. Peer mentoring is an example of one approach to cross-level peer tutoring and can be a vehicle to achieving both personal and academic goals. The mentor's role is to provide "guidance, advice, feedback and support to the less experienced mentee; to improve overall academic performance; and to encourage mentee personal growth" (Falchickov 2001, 38). Mentoring programs in student associations meet these criteria, and certainly strive to provide both academic and personal guidance to participants as they navigate the early stages of undergraduate education. Falchickov's analysis includes a comprehensive assessment of desirable characteristics of peer tutors, which are certainly applicable to peer mentors. Peer tutors are not teachers, and they have no credentials to teach. They have no authority to grade or influence the curriculum and materials, but they are "more likely to be able to create an open communicative atmosphere than a teacher" (Falchickov 2001, 4).

Both mentors and mentees benefit from their pairing. The benefits for the mentee are implied in the very existence of the mentoring program, and the benefits for the mentor have been explored in some detail in other literature. Most importantly, "simply preparing to be a peer helper has been proposed to enhance cognitive processing in the helper—by increasing attention to and motivation for the task, and necessitating review of existing knowledge and skills" (Topping and Ehly 1998, 13). One of Knowles's predecessors, Eduard Lindeman, emphasized the collaborative approach to adult learning, calling it

“a cooperative venture in nonauthoritarian, informal learning” (Knowles 1984, 30), a description that is certainly fitting for peer mentoring programs.

Libraries and Peer Learning

To ensure both the mentor and mentee get the most out of collaborative initiatives with the library, it is important to start with a clearly defined role for the mentor and support it on an ongoing basis. In their exploration of how libraries can implement peer tutoring in their programming, Susan Deese-Roberts and Kathleen Keating (2000, 25) identify training tutors as the key to achieving success. Although Deese-Roberts and Keating are focused on building a peer-tutoring program in the library, the principles lend themselves to library outreach and instruction to peer-mentoring groups outside the library. The literature notes that librarians must foster a sense of authority in tutors as teachers, which can be done with an exhaustive orientation to library policies and procedures that affect their role, and to library services (even ones that the tutors themselves do not use, as they may still need to make referrals), as well as to documentation and ongoing support for their role as tutors (Deese-Roberts and Keating 2000, 38–41). Moving forward from the orientation process, a common academic experience should form the basis of the tutor-tutee relationship (36), with the tutor usually having familiarity with the course content and the tutee seeking help with the course content. Adapting a library’s peer-tutoring approach for peer-mentoring relationships can be beneficial in cases where disciplinary research has unique methods and sources to consider, a situation that is often present in student associations focused on a particular discipline, such as a history students’ group.

Building on the literature of libraries’ efforts to incorporate peer-tutoring programs, researchers have studied student roles in other formalized library instruction services to some degree. Most recently, Brett Bodemer (2014) provided evidence of undergraduate student capacity to provide library reference and instruction services. He situated his study in the context of peer-assisted learning (PAL) and backed up his claims with case studies. His ultimate conclusion was that undergraduate students are capable of and, indeed, *should* provide both reference and library instruction services. The case studies referenced do not look at these services in a peer-mentoring setting, but his broader points apply. His argument in favor of undergraduates providing reference services is particularly strong. He notes that due to their lifelong exposure to database searching through products like Google, “they have the rudiments of searching, however primitive. With limited but strategic training, they can gain sufficient expertise in the use of library resources to help others” (Bodemer 2014, 168).

Daisy Benson and Keith Gresham (2007) applied author and journalist Malcolm Gladwell's (2000) theories about social epidemics to information literacy distribution in the context of post-secondary student groups and associations. Gladwell's theory asserts that ideas and knowledge can spread through social groups just as disease can spread during an epidemic (Benson and Gresham 2007, 245). The authors did not focus on cases of outreach to mentoring programs within student associations, but on building new partnerships for disseminating information literacy. Framing information literacy as a social epidemic and using Gladwell's theory about how social epidemics spread, they created an innovative theoretical framework for librarians to collaborate with student associations. Expanding on Gladwell's "Law of the Few" that focuses on who delivers the message, they established a model for information literacy delivery based on definitive roles for librarians (mavens), students who publicize and encourage adoption of information literacy as taught by librarians (connectors and salespeople), and the students who are recipients of the message.

In order to find students to fill these roles, Benson and Gresham used Gladwell's strategies for identifying and recruiting the best candidates to be connectors. They were building their outreach efforts from the beginning, and not relying on previously established programming. Librarians who are reaching out to student associations that have existing peer-mentoring programs in place would not necessarily need to apply Gladwell's theory to this extent, as the best connectors will likely be established already through the mentor application and selection processes.

Nevertheless, Benson and Gresham's 2007 study is an early effort to construct and apply theory to library relations with student associations. In addition to confirming that student associations are underserved stakeholders in information literacy instruction, their analysis emphasizes that a librarian must foster relationships to meet these associations' often unique and complicated information needs. Librarian strategies to identify the strongest allies for information literacy instruction within student associations are innovative, but not entirely fitting for associations that have existing programming that librarians are trying to help improve, rather than build. In existing peer-mentoring programs, student associations have already identified their mentors through previously established processes, and librarians may not be able to contribute meaningfully to these processes. Benson and Gresham creatively and successfully used Gladwell's social epidemic theory and applied it to ideas, knowledge, and information literacy, illuminating how knowledge can also be a social epidemic. Framing information literacy as a social epidemic is an important shift toward finding creative ways to disseminate it to students outside of the formal curriculum.

THEORETICAL INTERSECTIONS AND APPLICATIONS

Using Benson and Gresham's assertion that information literacy is a social epidemic, librarians can apply multiple theoretical frameworks for reaching out to student association peer-mentoring programs. For example, in order for information literacy to gain traction and be successful, it must be disseminated to students in innovative ways. To facilitate spreading the epidemic, librarians should look outside the formal curriculum toward avenues where research has shown that students are more enthusiastic about their learning experiences—in their chosen, constructed, and trusted social networks.

An understanding of student associations as trusted social networks on college and university campuses is derived from two seminal learning and psychology theories: Newcomb's (1966) assertion that peer groups are the most influential connections in higher education, and Piaget's (1970) conclusion that peer connections foster the greatest exchange of ideas and critical thinking. Through this lens, student associations have the potential to produce the highest levels of engagement with information literacy instruction. The structure of social networks has evolved considerably over time. Online social networks and social media are seemingly ubiquitous on college and university campuses. While the study of social media and its role in peer-mentoring and research support is worthy of extensive exploration, it is beyond the scope of this particular discussion.

Within the groups, students drawn together by a common interest (e.g., disciplinary study, academic program enrollment, or political affiliation) form social bonds that impact their academic and personal experiences. Everett Rogers's (2003) Diffusion of Innovations Theory discusses the dynamics of common experiences as a deciding factor in whether or not people will adopt an idea or, in this case, a social epidemic: "individuals depend mainly on the communicated experience of others much like themselves who have already adopted a new idea. These subjective evaluations of an innovation flow mainly through interpersonal networks" (Rogers 2003, 330–31).

To capitalize on the power of the trusted social network, librarians can add value to existing programming that many student associations offer their members. Previously established peer-mentoring programs can benefit from librarian-student collaborations to create an upper-lower year, cross-level peer interaction that benefits both mentors and mentees. Librarians can strengthen these ties by implementing comprehensive training procedures and supports, as discussed by Falchickov (2001). Treating mentors as adult learners who are self-motivated and eager to share their experiences to solve problems will produce informed and competent mentors. As a result, they will engage with the material they are teaching, and the mentees will get the information from a trusted source and see from their experiences the benefits of adopting information literacy skills.

Treating information literacy as a social epidemic to be spread through influential, trusted social networks that provide programming beneficial to all participants is one of the library's greatest potential strategies in reaching as many students as possible. This approach will not save enormous amounts of time, as mentors still need to be trained and supported throughout the process. However, mentors can reach a broader range of students than librarians can through traditional classroom instruction. Finally, the message that information literacy and critical-thinking skills are essential will be a more powerful one if delivered by peers. The added benefit of creating scalable, student-centered approaches to information literacy can be especially useful in larger institutions where librarians are often trying to reach high numbers of students through instruction services.

STUDENT ASSOCIATION LIBRARY OUTREACH AT THE UNIVERSITY OF TORONTO

The University of Toronto is the biggest university in Canada, with over eighty-eight thousand students enrolled across three campuses, and 141 librarians serving that population (University of Toronto 2015a). There are over sixty thousand undergraduate students, and over forty-three thousand of those are based at the downtown St. George Campus. Over seven hundred undergraduate programs are offered, and over eight hundred student clubs operate across all three campuses (University of Toronto 2015a).

As with most college and university campuses, there is great diversity in these student associations. They may be based on demographic factors, academic programs and disciplines, even hobbies or other personal interests. Each association has specific information needs relating to its mandate, creating a prime opportunity for librarians to reach out. In addition, many of these groups are coordinating and offering unique programming for their members. They often host academic events, lectures, debates, career programming, and social events. In some cases, they offer various types of academic and personal support to their members, both formally and informally. Many of these student associations are the influential social systems cited by the theories discussed above. They fit the definitions of peer groups as offered by Newcomb (1966), Piaget (1970), and Vygotsky (1986), and share common experiences discussed in Rogers's (2003) Diffusion of Innovations Theory. Students who join such groups by choice display the initiative of adult learners as referenced by Knowles (1984). With few exceptions, student members are at various levels in their undergraduate programs, and as a result, engaging in peer relationships as described by Falchickov (2001).

Today's students are taking on greater responsibilities both on and off campus, such as full- and part-time employment to help finance their educa-

tion (Canadian Federation of Students 2013). More than ever, students need resources to balance competing responsibilities in order to be successful in their studies. While a variety of student services are available on campus to facilitate academic success, students also rely heavily on their social networks for academic support, with 30.5 percent of first-year students at the University of Toronto seeking academic support by collaborating with their peers (University of Toronto 2015b). Student associations on campus are just one example of a social network from which students can seek academic support. Increasingly, students count on their peers to navigate a large campus. They seek guidance and support from their experienced peers, within the types of mutually beneficial relationships advocated for by Falchickov (2001).

Although librarians are in a position to support these social networks, at the University of Toronto, there is no consistent library strategy for reaching out to student associations and other social networks. Some student associations can be partnered with a subject-liaison librarian by the nature of their disciplinary focus, but this is usually not the case, due to the diversity of student associations on campus. A small number of librarians reach out to students in various ways, including connecting with them at the Clubs Fair, which offers an excellent opportunity to connect with student associations catering to many academic disciplines. The student union's free event during Orientation Week features over three hundred campus clubs and is widely attended by undergraduate students. In addition to leveraging existing events, some librarians send an introductory email to the association's leadership at the beginning of the academic year that outlines available services.

In the case of the History Students' Association (HSA), the librarian-association collaboration came from one of the executive members having received in-class information literacy instruction, and then making the connection between information literacy skills and her role in the association. In particular, the student was looking for assistance in developing a series of workshops for the new mentoring program the HSA was creating. An information literacy and research skills workshop was initially planned to be only one workshop in the series, complementing other programming to address issues such as study strategies, finding careers with a history degree, and other practical skills. While this initiative was successful in its first year, both the librarian and the HSA executive committee members recognized the value in information literacy instruction and took steps to integrate it further, particularly through the association's new mentoring program.

The association is representative of undergraduate students studying history at the University of Toronto (graduate students have a separate association), and the executive committee wanted a mentoring program to serve its student members. The goals of the mentoring program are twofold: to facilitate the early undergraduate transition to studying history at the university

level, and to develop leadership, communication, and coaching skills in upper-year students who act as mentors. Mentees are encouraged to reach out to their mentors about any academic issues they experience. I met with executive members in the summer of 2015, before the program was scheduled to begin in the fall semester of the same year. At that time, the executive members proposed a “train-the-trainer” approach to information literacy programming for the association through the mentoring program. Peer-mentoring programs can benefit greatly from a train-the-trainer strategy, and the executive members wanted mentors to be equipped to answer basic research questions from mentees. In training the trainers, they hoped that mentors would sharpen their own research skills and refresh previously learned skills and resources. In its first year, the program paired six mentors with ten mentees. In its second year, twenty-six mentors were paired with thirty-four mentees. Unless requested, all pairings were one-to-one relationships, with some mentors accepting more than one mentee.

Preparing students to teach their peers in a mentoring capacity differs from most traditional information literacy programming tied to courses. In particular, the theories discussed in the previous sections can be helpful in identifying how mentees might approach seeking research help, and how mentors can fulfill these requests. The importance of shared experiences in peer-mentoring groups means that mentees will likely seek advice from their mentors about their experiences with a particular course, instructor, or assignment, as opposed to asking for help in developing research skills. This shifted my pedagogical approach from developing content based on skills to content based on information. Instead of focusing on teaching their mentees to become proficient researchers, mentors were expected to help mentees navigate a wealth of services and resources. As a result, the content of the training sessions reflected knowing what tools and services mentees should know about, and who they should contact for help in developing particular research skills.

In both years of the partnership, mentors attended a two-hour training session at the beginning of the academic year on how to provide basic research support for entry-level undergraduate history students. Training was focused on helping students get started with research and making appropriate referrals. In addition to learning about resources offered, mentors were introduced to academic and research support services they could recommend to students. Many of the mentors were exposed to services that they had not known existed. Resource lists were created to provide ongoing support, and mentors were encouraged to make referrals to the library and other campus services where appropriate. A refresher training session was provided in the second semester to ensure mentors had retained the previously taught content and to discuss any issues that had come up with mentor-mentee interactions.

Near the end of the 2015–2016 academic year, I organized a focus group to gather qualitative data. No participants showed up, so an anonymous survey was developed and sent to trained mentors. With only six trained mentors and only two responses to the survey, there was no reliable data to provide insight into the training provided. With a larger sample of twenty-six mentors in the 2016–2017 academic year, the survey was resent, with a similarly low response rate. I am continuing to explore assessment methods that will help increase the response rate in the future.

As the HSA mentoring program continues to expand and become a popular way for undergraduate students to connect with each other, a more comprehensive training and support program is being planned to meet the growing information needs of both mentors and mentees. I have since identified another student association in my liaison area that is offering a peer-mentoring program and am currently undertaking similar train-the-trainer strategies with that group. I plan to implement a more rigorous assessment of this outreach effort in close collaboration with the association's executive board.

Understanding the level of meaning that students ascribe to peer interactions can help librarians determine which aspects of their collaborations with student associations to emphasize. Meaningful assessment of outreach initiatives is essential to build fruitful relationships and efficient programming. It is recommended that librarians develop a decisive assessment strategy in the early planning stages, and in collaboration with an association's executive committee. In addition to helping librarians improve outreach services, assessment data can be useful for the associations themselves in growing or planning effective programs. Consultation with association executive members about shared goals for peer mentoring can also guide assessment approaches and ensure that both parties reap the many benefits of partnering to develop information literacy skills.

One of the challenges in working with student associations is the frequent change in executive members, which may lead to rapidly shifting priorities in association programming. To ensure an ongoing relationship with new leadership, librarians should commit to annual communication with association executives, ideally near the end of the academic year soon after their elections or executive selection processes, in order to plan for the following year. In some cases, extra time can allow association executives to think carefully about how they envision a partnership between its mentoring program and a librarian, particularly in the context of planning other unrelated programming that associations often undertake, such as social events. For the librarian, it can ensure adequate planning for content and assessment in advance of the traditionally busy fall semester.

CONCLUSION

Existing programming in student associations represents a largely untapped opportunity for librarians to reach more undergraduates. With many campuses home to hundreds of student associations, librarians must be strategic about sustainable outreach. Looking for intersections and overlap in the missions of student associations can provide an opportunity for collaborative training. Building collaborative programming with student associations from the beginning is an excellent approach to outreach, but adding value to established programming might increase buy-in from student association members, particularly when the endorsements and messages come directly from their peers. This also promotes a more sustainable approach to outreach for librarians who may not have the resources to continually develop and maintain new programming initiatives.

Much work has been done to consider how peer learning can influence the higher education experience, but little has been written on how peer-learning theory can inform librarian efforts to connect with students outside of the classroom, particularly in the dissemination of information literacy skills. Examining a number of theories from different fields has confirmed that several factors need to be taken into consideration: the messages that librarians want to communicate through the student associations, the structure and dynamics of the groups and their members, as well as the strategies that would allow librarians to maximize their impact on student associations and the programming they provide. An examination of existing literature demonstrates that a single theoretical approach to library outreach to student associations does not accurately encompass all the ways that librarians can reach out. New collaborations and existing programs require two different theoretical approaches, and the latter should be focused on adding value, rather than on changing or re-creating what is already in place. Creating and applying relevant theories based on the type of outreach librarians are doing with student associations can help plan meaningful programming and predict the types of students and learners that might benefit.

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Part II

**From Start to Finish: Developing and
Implementing Successful Programs**

Chapter Four

Building Boot Camp Success

*Graduate Dissertation and Thesis Programs at the
University of Notre Dame*

Mandy L. Havert

The graduate student dissertation and thesis camp, hereafter referred to as dissertation camp, has its roots in an undergraduate senior thesis writing boot camp (Smith and Kayongo 2011). The dissertation camp is a co-sponsored program between the Hesburgh Libraries, the University Writing Center, and the Graduate School at the University of Notre Dame. The program continues to evolve as one of the premiere services available in the Hesburgh Libraries and on campus. Dissertation camp builds partnerships not only among the co-sponsors, but also with other campus entities. Programs include topics from the wellness program, the University Counseling Center, Graduate Student Life, the MBA program, and many others. The common thread for these programs is the goal of holistic professional development training for graduate students on campus.

Academic support for students is the mission and role of the Hesburgh Libraries and the University Writing Center. The Hesburgh Libraries' stated mission is to provide "distinctive collections, services, tools, and spaces that enhance learning, teaching, and research for, and in collaboration with, the University Community" (Hesburgh Libraries 2016). The University Writing Center specifically will "work with writers during all stages of the writing process—from understanding an assignment, to developing a thesis, to organizing the paper, to revising the final product" (University Writing Center 2016). The missions of the University Writing Center and the Hesburgh Libraries intersect to bring together resources and opportunities for student success at all levels.

The research literature recognizes that professional development related to completing a dissertation should begin early in doctoral students' academic careers (Wood 1991; Nyquist et al. 1999; McCloskey 2000; Andrews, Schinke, and Da Costa 2001; Lovitts 2007; Xiao and Traboulay 2007; Harrington 2009; Mastroieni and Cheung 2011; Powers 2014). Graduate-level writing camps are not unique (Mastroieni and Cheung 2011; Thomas, Williams, and Case 2014; Powers 2014), but whether boot camps or institutes, these programs are designed to support and cultivate scholars. Writing centers and graduate student centers have largely been responsible for dissertation camp design and implementation (Allison et al. 1998; Smallwood 2004; Mastroieni and Cheung 2011; Lee and Golde 2013; Simpson 2013; Powers 2014; Thomas, Williams, and Case 2014; Hansberry 2014). Due to the isolating nature of graduate-level work, different community-building measures are often built into camps to combat this challenge (Pontius and Harper 2006; Dancy and Brown 2011; Bain, Fedynich, and Knight 2011; Lee and Golde 2013). Managing such a large research project can negatively impact graduate students' mental and emotional health. Therefore, many dissertation camps also teach students how to incorporate downtime and relaxation into the research process in order to be successful not only as graduate students, but also as professionals (Waldeck et al. 1997). Finally, research has indicated that graduate students are more successful at completing their dissertations when they have an optimal space in which to work (Goldenberg-Hart 2008; Rudin 2008; Shill and Tonner 2004).

Based on this research, as well as feedback from students, Hesburgh Libraries aims to provide key elements in the dissertation camp design: workspaces that feature comfort and quiet, snacks and refreshments, easy access to research and writing resources, and social engagement programming to combat the effects of isolation and increase productivity (Pauley 2004; Lovitts 2007; Gardner and Barnes 2007; Gardner and Holley 2011; JISC 2012; Thomas, Williams, and Case 2014). This chapter's discussion will provide a case study example for how an academic library can design, organize, implement, and sustain a dissertation camp that effectively supports the needs of graduate students and also leverages campus partnerships.

BACKGROUND

The University of Notre Dame is a private, Catholic, research university, situated in north-central Indiana. The university has an undergraduate population of just over 8,600 students and approximately 2,000 degree-seeking graduate students. While traditionally known as an undergraduate institution, the Notre Dame Graduate School has continued to grow and develop programs. As part of efforts to improve recruiting and retention for graduate

students at the University of Notre Dame, in the mid-2000s the Provost convened an Ad Hoc Committee on Graduate Studies and Research (Burish 2005), and the Graduate School performed an environmental scan of the programs and the resources available throughout campus to support graduate students (Ad Hoc Committee of the Graduate School 2012). The results of the 2012 report highlighted misperceptions held about the Graduate School's programs and resources, noted that graduate students felt "invisible" within the University community, and also drew attention to the need for centralized graduate student professional development programming (Ad Hoc Committee of the Graduate School 2012). A cohesive team for graduate student professional development was formed in the Graduate School in 2012. This team drew members from programs across campus and met regularly to ensure that professional development programming for graduate students did not replicate efforts. Librarian Cheri Smith was a part of this inaugural team.

The Hesburgh Libraries constitute a diverse system, featuring the flagship Hesburgh Library that houses three centers and specialty libraries along with eight branch libraries and specialty centers located throughout the Notre Dame campus. The Libraries are home to nearly two hundred faculty and staff, with on-site visits from over 1 million patrons annually. On-site and online visitors have access to more than 3.5 million print volumes and nearly 3.5 million electronic volumes. In an effort to further its core mission of "connecting people to knowledge," the Libraries offer a vast array of expertise, services, resources, and spaces to ensure the academic success of the campus community (University of Notre Dame 2017).

Just prior to the formation of the graduate professional development team, Susan Ohmer, then interim director of the Hesburgh Libraries, suggested that the Libraries develop programming in partnership with the Center for Undergraduate Scholarly Engagement (CUSE). Cheri Smith, then coordinator for instruction services, developed and instituted the first Senior Thesis Camp in 2010. The initial camp enrolled eighteen students for an intensive program of research and writing (Smith and Kayongo 2011). A library service partnership with the University Writing Center already existed in the form of hosted, weekly, on-site writing consultations five days a week during the regular academic semester. Smith arranged for these consultants to offer scheduled writing consultations during this research and writing boot camp. Senior thesis writers also were encouraged to consult with subject librarians to assess the proper scope of the literature research they conducted. Secondly, research consultations were used to narrow topics and focus the research questions (Smith and Kayongo 2011). Each day of the five-day camp required six hours of time commitment, and also included lunch service and workshops designed to produce successful senior theses. While on site to provide consultations for the undergraduate camp, the graduate University Writing Center consultants had time to focus on their own research and

writing. Subsequently, word spread about the undergraduate writing camp among graduate students, and the graduate students asked for their own camp to support research and writing at the dissertation or master's thesis level. When the request for a dissertation camp emerged, Smith obtained co-sponsorship from both the Graduate School and another professional development team partner, the University Writing Center. Using the successful model of the senior thesis camp, the first dissertation camp was held in spring semester 2011 under Smith's design and supervision (Havert, Bayard, and Capdevielle 2016). In 2012, a library-wide program reorganization was completed and the first graduate student outreach librarian was appointed. As the incumbent in that role, I began review and operation of the camp in successive years.

DISSERTATION CAMP GOALS

The design of the dissertation camp was initially based on the feedback from the undergraduate camp. Graduate student dissertation and thesis writers have many of the same needs as undergraduate senior thesis writers, including the need for supported time for focused research and writing, ongoing development of process-based skills to sharpen writing output, programming to encourage productivity to make steady progress toward project completion, and the opportunity for consultations with research and writing professionals. However, unlike undergraduates, an additional challenge graduate students face is isolation from the larger campus community. Therefore, the dissertation camp for graduate students has added activities to the camp's schedule to develop community among camp participants. The camp also provided an intersection of services offered by other campus units as a one-stop place to meet graduate student dissertation needs. Overall, dissertation camp has three goals: to provide students with focused time for writing and research, to teach students the skills needed to be successful scholars, and to offer a chance to build community with other graduate students.

A meaningful scholarly research and publishing agenda is built by focusing time on practice and outputs. As developing professionals, graduate students benefit from the emphasis on regular writing time. While binge writing for up to eight hours a day is not sustainable for most researchers, dissertation camp provides longer writing periods in which the students can observe and learn about themselves as writers. Robert Boice counters the idea of binge writing by acknowledging, "Most scholarly writing can be done with small, daily investments of time, regardless of academic specialty" (Boice 1990, 91). What is tenable is the ability to cultivate a regular practice of research and writing, the very foundation of success for members of academe (Boice 1990; Rockquemore 2015). This formation of a consistent writing practice is a key outcome for dissertation camp. Whether this skill building

happens as part of the support received from within a graduate student's program, or as a part of centrally managed professional development track, what matters most is that students build a regular practice of scholarship (Allison et al. 1998; Boice 1990; Lovitts 2007).

Dissertation camp also introduces multiple research techniques that students try during the camp week. The research techniques are presented as a series of short workshops. During the workshops on research and inquiry, students learn how to annotate and mark up text, how to work with multiple resources, and how to adeptly manage and organize large amounts of information. Through self-assessment, students learn whether a given technique works well for them. For example, many graduate students struggle with citation management methods and tools. The number of similar tools available is daunting, and students in the camps often express frustration at trying to find a useful tool. The search for the "perfect" tool often results in choosing no tool at all. Research and citation management practice is offered during the camp using subscription services such as RefWorks or free services like Mendeley or Zotero. Events, which often include panelists who are early-career researchers employed by the Libraries and the Graduate School, offer insights into why graduate students should use RefWorks or any of the freely available tools to manage research content.

Many professionals, including graduate students, can benefit from being part of a community of practice (Pauley 2004; Maher et al. 2008; Lee and Golde 2013). Students at dissertation camp are largely working in niche areas on their research. Feelings of isolation can creep in during the dissertation process. Therefore, it is important for students to take advantage of supportive social structures and fun opportunities outside of research and writing (Maher et al. 2008). Dissertation camp encourages socialization in its framework. Each day is framed by graduate students sharing goals and talking through a self-assessment of what worked and what did not work for their needs during camp. Taking time at lunch to meet others and talk is also encouraged. The conversation does not need to remain focused on work or the dissertation, but if it does, working relationships may form.

Work-life balance is important for strong mental health (Pauley 2004), particularly for graduate students working on intensive research projects. Students may shut down their own productivity if they don't know how to manage stress and burnout. The feeling of not working on research and writing 100 percent of the time can contribute to feelings of failure or falling short as a scholar. Impostor syndrome or impostor phenomenon may emerge. First discussed by Pauline Clance and Suzanne Imes, impostor phenomenon was initially studied and described in women as the tendency to self-deprecate one's high ability and intelligence while believing that others in the work or collegial circle have been "fooled" into believing the achievements are real (Clance and Imes 1978; Weir 2013).

During dissertation camp, students, both with and without families, are encouraged to schedule time away from research and writing to refresh. Stephen Covey, the productivity guru who first came to popularity in the 1980s, wrote often of “sharpening the saw” (Covey 1999). In Covey’s view, ongoing development of the whole person is important. To further that development, taking time to practice skills both inside and outside of academe can lead to balance. Campus partners from the wellness programs and the University Counseling Center are brought into dissertation camp to help students identify ways to remain engaged in the world, to teach them about the insidious nature of impostor syndrome, and to encourage time with families and friends to balance the work they are doing. In the workplace, coaching and time spent with other colleagues who can bolster self-image, have been shown to mitigate feelings of deficiency (Waldeck et al. 1997; Weir 2013). Research and scholarship are important, and for many students are the sole reason for attending graduate school. As in the workplace, graduate students are conditioned to expect success, and will face the inevitable challenges of work-life balance and mental exhaustion (Cokley et al. 2015), so being able to confront impostor phenomenon and build positive habits to succeed is just as important as research and writing skills.

DISSERTATION CAMP DESIGN

Dissertation camp is a weeklong experience held once an academic semester in the library, and often includes up to sixty students. The camp typically runs Monday–Friday and follows an 8:30 a.m.–4:30 p.m. schedule, with some exceptions. A light breakfast and lunch, as well as snacks for breaks, are provided every day. Each day includes time for writing and research, workshops, and time for reflection or meeting in small groups. The daily schedule is set from year to year, based on prior camp successes and learning from the extensive survey evaluations completed by the participants. Availability of workshop facilitators during the camp dates also influences the content offered from year to year. Sample daily schedules from prior academic years are available in CurateND, the Notre Dame institutional repository (Havert, Bayard, and Capdevielle 2016).

Each camp day begins by gathering for a light breakfast. Arrival by 8:30 a.m. ensures time for a light breakfast before the first writing and research session begins. Healthy meals and snacks sustain students with necessary fuel for their work. After the writing time begins, students have unlimited coffee and tea available during the day and may take snacks for their morning work time from the offerings at the breakfast service. The workspaces are intentionally separated from the food service spaces. Students are asked to convene in the workspace at the 9:00 a.m. start time for a brief group goal-

setting session each camp day. Goal setting is a process that allows camp participants to envision and articulate what they want to get done in a set period of time. On the first day of camp, goal setting is discussed in detail by members of the University Writing Center and includes some social sharing time to model how to build social accountability into one's practice. For example, a student may hope to fully outline their first chapter and write a draft of its first section in a given day. By taking a moment to write down, and then talk out loud with a partner from camp, the student not only sees the goal, but also hears herself articulate it to her goal-setting partner. After sharing with a partner in the group, students are invited to share the goal with the entire camp, or to write it on a community whiteboard that will stay in place for the week's camp. Throughout the day, the student can revisit her own progress and begin to see whether the goal is realistic and attainable under focused research and writing circumstances.

A lunch break is provided after the first writing period. The registration form records any food allergies or preferences to ensure service for everyone. Nearly all preferences are accommodated, from the common vegetarian to those with gluten sensitivities or other stated needs. Students have indicated that healthy, protein-laden meals and snacks are preferred, so convenience foods are limited. Lunch service is usually contracted with University Catering or other local and reliable caterers. Cuisines are varied throughout the week, and include selections such as Mediterranean buffet, Irish buffet, and a soup, salad, and baked potato bar. Typically, pizza or a boxed lunch is delivered for the last lunch of the week. Taking the burden of meal planning from the graduate students allows them to focus more attention toward planning each day's work and activities.

Workshop sessions are scheduled at various times according to the availability of the presenters, but most of the workshops have been provided as lunchtime sessions, allowing a half hour for lunch and a half hour to forty-five minutes for the workshop presentation. The exception to this timing has been the dissertation format workshop, a three-and-a-half- to four-hour, hands-on workshop provided by the dissertation editor and manager in the Graduate School. The workshop content is variable, but has included the following topics on a consistent basis:

- Goal setting and review
- Research and writing logs
- Citation and research management tools and methods
- Stress management
- Using the dissertation format in Microsoft Word and LaTeX
- Time management and productivity tools

Workshop sessions last from a half hour to a full afternoon. Feedback from facilitators and graduate students concerning the preferred duration and timing of the workshops has varied. Since many of the graduate students repeat participation in the dissertation camp, organizers attempt to vary the programming from semester to semester as much as possible without leaving those new to camp behind. Each camp does have central or core workshops, such as the dissertation log talk or a talk about intellectual and emotional well-being that is guided by a member of the University Counseling Center (Pauley 2004). Students new to dissertation camp can take these workshops to learn practices that become integral to their work.

Over time, participation in the workshops has dwindled due to the combination of repeat participants and the need to provide the same core workshops again and again. Students often want to return to writing as soon as possible after taking a lunch break, so camp organizers work with students to remind them that taking time away from focused and intense work can actually bring more productivity and clarity to the research and writing process. Those students who have previously attended dissertation camp are strongly encouraged to participate in the offered workshops as a refresher, to contribute to discussion, and as a break from the intensive research and writing that happens in the morning and afternoon. The program planners do anticipate changes in future camp design that may result in fewer repeat participants and thus increase rates of participation in the lunchtime workshops.

The afternoon has another three- to three-and-a-half-hour writing period scheduled, and also includes unlimited coffee and tea service. During this time students may also take part in additional workshops described above, or schedule an appointment with a University Writing Center consultant. A break is scheduled midway through this writing period. To allay feelings of imposed disruption, students are invited to break when they choose between 3:00 and 3:30 p.m. Per the design of the camp, they will need to walk from their workspace back to the food service location for snacks, which helps ensure they get up and move around. Students are also encouraged to take five to ten minutes at lunch to get outside the building for some fresh air. This recommendation also is made during the mid-afternoon break.

Via survey responses, students have asked to return to work immediately after eating lunch in order to write more, but some responses specified the desire for longer, more intensive workshops scheduled mid-afternoon as a break. Through analysis of the survey feedback, organizers have ascertained that students seek to use every minute of available writing time during camp, instead of using some of the time to learn and apply new skills and techniques. To accommodate this preference, most of the workshops offered in the afternoon come back to the basics of effective research and writing processes, such as editing, timed writing, and free writing, among other skills. Mid-afternoon workshops were offered in fall semester 2017 based on partic-

ipant feedback, but they resulted in zero attendance. Workshop organizers are trying to accommodate a variety of activities while still ensuring that students learn the skills they need.

At the end of each day, the students are drawn together once again to wrap up their work. This wrap-up is a time when students can and do revisit their goals and assess progress. Students are invited to reflect on their progress and think about what they learned through their work for the day. Perhaps their stated goal was too large or too small. Sometimes intensive tasks, such as editing, are best done at a specific time of day. Energy levels and the ability to focus vary over the course of a day. Camp structure helps the students see when their work is most productive by type. Students are encouraged to share these reflections with one or two other participants in the camp. In these small groups, students can offer empathy and support to one another. After small-group discussions end, sharing points discussed with the large group is encouraged. During this time, the broader audience is invited to speak about observations on many topics, such as what worked, what did not, or what was the most surprising new tool or technique that they tried. Students can hear from others who have similar struggles through this community engagement. Solutions to the day's challenges may emerge. The tendency to isolate may be reduced, and students who suffer from imposter syndrome may also have some stress alleviated when they hear that they are not alone in their struggles (Maher et al. 2008; Bain, Fedynich, and Knight 2011).

In addition to goal setting and reflection, students are provided with support for trying new processes for productive writing, targeted revisions, and other components of their dissertation work. For example, students are invited on the first day to create a dissertation research and writing log or, simply, a dissertation log. Brief examples of what a dissertation log is and does are provided at this first morning session. A longer workshop is given after lunch on the first day, and details some variations on log content, format, and structure. This workshop is essential and is given at each camp. Above all, a dissertation log provides a place for recording the writer's process. Log entries may include self-reflections, word counts, writing time completed, observations about how the writer works best with which activities, a list of planned and completed goals or tasks, what progress is being made, and how the writer will begin his next scheduled session. Writers who keep logs can see progress made by reviewing the log daily.

The University Writing Center consultants reconvene the students for the debriefing session at 4:30 or 4:45 p.m., which includes daily wrap-up of reflections, sharing, and planning for the next writing period. The director of the University Writing Center speaks of the practice of "parking on the downhill slope," as explained by Joan Bolker in her book, *Writing Your Dissertation in Fifteen Minutes a Day* (1998). Parking downhill means that

the students take time before they pack up and leave for the day to note what they have most recently been working on, what comes next in that work, and how best to start the next day. Experiences with this construct vary. Some writers prefer to leave off in mid paragraph (or sentence), while others create a list of where to start the next day in their dissertation log. In order to be ready to write at the beginning of a shorter writing period, keeping track of where to begin again by making notes at the end of the prior writing session is essential. Writers can do this in whatever manner works best for them on an individual basis.

One talk traditionally given during the final wrap-up session on the last day of dissertation camp week addresses how a participant can take the camp experience with them and continue making daily progress in their work. After the week of fully supported and scheduled research and writing time, the student returns to independent work again. The student must again plan his own day, prepare his own meals, and be accountable for work completion. To succeed, the student is instructed to look back on the camp and to use the tools introduced over the course of the week. Camp organizers have regularly sent daily email summaries of the discussion and workshops to all participants. The students have been introduced to these tools so that they can find ways to use the tools again during those days and weeks when independent writing must be incorporated in the other competing priorities of the workday. Organizers literally instruct the camp participants to “take the camp experience with you.”

The work of Robert Boice discussed earlier is informative here. Boice is a psychology faculty member known for his work on advice to writers and new faculty members (Boice 1989; 1990; 1992). The staff providing the wrap-up draw from Boice’s work to explain that the type of writing done during this period of time has been binge writing: a lot of writing done in a compressed period of time, a luxury that most researchers will not have in their day-to-day practice. In the course of getting work done as a faculty member or researcher, these large blocks of time do not come regularly. Camp participants are encouraged to think about how nearly everyone has a half hour or an hour each day that could be used for productive writing time, if preparations have been made to begin writing at the start (Rockquemore 2015). This idea of chipping away at a larger project in smaller bursts of time is one framework by which writers succeed. Taking time each day to be in contact with research and writing keeps the work in the forefront of thought and allows for work to happen in a focused way, even if just for a half hour or so. A surprising amount of work can be done in this manner on a regular basis (Boice 1992).

In the next part of the end-of-week wrap-up, any participants who have found the current writing session to be productive are invited to consider forming a writing accountability support group to build an ongoing commu-

nity of practice (Maher et al. 2008). Those in the group should have like-minded goals, yet need not be working in the same discipline. The writing group can choose to focus on different areas of support for one another, including progress goals, process goals, editing, or troubleshooting roadblocks. Whatever the shared goal, it is helpful to write this goal down so that the group can remain true to its purpose. For some groups it is as simple as agreeing to be together, writing, at a certain time, on a set schedule, in order to hold one another accountable for getting work done.

At Notre Dame, support for these writing groups is available from the Graduate Student Life program. The director of the program has set aside a portion of the program's budget to sponsor meetings of writing accountability groups. This support includes a five dollar per person stipend, per meeting, for those groups who register and are willing to do the paperwork to be reimbursed. More information is available through the University of Notre Dame institutional repository (Beck et al. 2016).

Students are reminded that they are welcome to continue using consultation services after the camp concludes. Consultations after camp are actually preferable for the University Writing Center staff, as it is beneficial to review someone's writing prior to a meeting; this level of review is difficult to provide during a camp setting that affords only a half-hour consultation window. Likewise, research and subject area librarians are available to help students with everything from resource discovery and identification to building maps and figures for the final dissertation.

DISSERTATION CAMP FUNDING

Funding for the dissertation camp comes primarily from the Hesburgh Libraries operating budget for the Teaching, Research and User Engagement Unit. No fixed budget was established in the early iterations of the camp, but through trial and error, budget amounts have been estimated to support a per diem rate of fifteen to seventeen dollars per participant for the weeklong camp. Both of these budget scenarios are aligned with the University guidelines for travel expenditure per diems. It is a best practice to set a per diem when beginning, and then analyze the actual expenditures after the fact and adjust for future budget years accordingly. Building a working relationship with the library budget manager can help librarians with understanding the budget coding structure and where and how tax exemption status is shared, so that they can be good stewards of the funding.

Funding for food and other refreshments is a large portion of the budget. Food budget savings can be achieved through shopping locally with wholesale buying clubs or commercial food suppliers. Institutions may be constrained by requirements to use on-campus catering services only. When this

is the case, it is best to establish a working relationship with catering and seek any accommodations they may be able to make on behalf of a student-focused event. It does not hurt to ask about discounts or best ways to stretch the dollar. For example, hosting a “build your own sandwich bar” will probably be less expensive than providing sub sandwiches pre-made by catering. To further maximize the budget, be sure to watch what quantities are provided by the catering service and take stock of any leftovers or shortages. Catering orders tend to be filled by a head count that serves as an estimate. It is possible that orders for forty from catering may serve only thirty-five in actuality. Taking inventories and notes at the end of service can help ensure more accurate orders for future events, thereby saving some money.

CAMPUS PARTNERSHIPS

Dissertation camp often provides services for up to sixty students at a time, which requires many resources, both financial and human. While the majority of funding is provided by the Hesburgh Libraries as described above, campus partners provide many important services and contributions by way of time and talent. The size of the dissertation and thesis camp requires many hands to keep all the parts moving. Opportunities for individuals to contribute include event setup and management, workshop and content session facilitation, scheduled writing and research consultations, daily goal setting and wrap-up facilitation, and post-event assessment and analysis.

Service for the dissertation camp is provided on a volunteer basis, with the exception of the University Writing Center consultants who are paid an hourly rate. Camp organizers in the Libraries and staff members of the University Writing Center recruit staff from within their programs, as well as from partners in the Graduate School and other areas of campus, to help with the various duties for the camp.

ASSESSMENT RESULTS AND ADJUSTMENTS TO THE CAMP

Each camp concludes with a survey, designed and administered in Qualtrics to evaluate the program effectiveness and content. From the feedback provided by participants, adjustments are then made to future camp offerings. The initial assessment tools were paper format evaluations, similar to those used in library instruction or other traditional workshops held in the Hesburgh Libraries, but over time more detailed information about different aspects of the weeklong dissertation camps was needed, and the assessments evolved to be more complex. An evaluation exemplar is available through CurateND, Notre Dame’s institutional repository (Havert 2016).

The evaluation covers time allocations for each section of the camp, locations for the various activities, workshop and consultation quality, as well as food quality. It also asks participants to imagine and describe their perfect camp. The evaluation contains a series of standard questions requested by the Graduate School Professional Development team. Specific data is not recorded for the number of research consultations or University Writing Center consultations given during the dissertation camps, but the camp survey does ask respondents to report whether or not each type of consultation was used and, if used, to what degree the consultation was or was not useful (Havert 2016). The evaluation is lengthy, at just over twenty questions in its current iteration. However, without detailed feedback on the parts of camp that matter, a full picture of what does and does not work would be missing. Jason Pontius and Shaun Harper (2006) recommend systematic assessment as good practice in graduate student engagement.

Survey responses have been positive overall, but critiques are also taken seriously. Shortcomings cannot be addressed without first learning about them. Response rates from participants have been consistent at over 50 percent, which is excellent for a relatively lengthy survey. Students are told during the final wrap-up session that camp cannot be improved without their responses. Students do respond to the survey because camp organizers consider and communicate changes made to the program based on those responses. When recommendations cannot be implemented or otherwise accommodated, organizers discuss this with students in the successive camps. Participants can see how deeply committed the organizers are to student success, and therefore they take the time to provide detailed feedback. Periodically, the organizers will use a face-to-face focus group for acquiring feedback, but the survey yields enough details that a focus group is rarely needed.

For an informal assessment, the organizational team takes the time to develop one-on-one relationships with camp participants wherever possible. Making the camp a welcoming setting in which students are recognized by name lends to its credibility as an event that matters as much to the University as it does to the individual graduate student. Since organizers learn students' names as well as the gist of the students' research, individual challenges, and even preferences for mealtime and food service, graduate students are forthcoming about their needs and what's not working during the course of the camp. While it is important for the dissertation camp team to keep to the overall framework and structure of the boot camp, the team tries to make adjustments during the course of a camp, as needed.

DISSERTATION DAY CAMPS AND ACADEMIC DEPARTMENT CAMPS

In 2014, dissertation day camps were added based on consistent feedback in the program evaluations that asked for more opportunities for focused writing time. The dissertation day camp is a Saturday event, hosted four times per academic year and typically running from 9:30 a.m. to 4:30 p.m. Since day camp begins later in the morning, it has only light morning and afternoon snacks, in addition to a boxed lunch. During the 2014 Spring Graduate Student Appreciation Week, the first dissertation day camp was planned and held. That day camp attracted thirty registrants, of which twenty-one attended the full seven-and-a-half hours of writing. In the first evaluation for a dissertation day camp, all feedback was positive and the event was added to the next academic year calendar. As the per diem for food for the day camp is only ten to twelve dollars per person, budget plans accommodated two of the day camps each semester in the following fiscal year. The day camps are now a standard offering and are held in the months prior to and following the weeklong fall and spring break camps. Day camps provide an additional opportunity for research and writing to help graduate students continue moving forward in their work.

In summer 2015, Todd Walatka, the assistant chair for Graduate Studies in the Theology Department, reached out to the Graduate School to ask about a discipline-specific dissertation camp for the fourth-year theology students. Walatka had heard from current and former theology PhD students about the power of the dissertation camps in helping the students move toward completion. In addition, changes in funding structure and stipend availability for graduate students in the College of Arts and Letters increased the Theology Department's desire for their students to complete their work within a strict five-year, funded timeline. The hope was that by providing the tools and structures of the dissertation camp at the beginning of dissertation work, that students would move more quickly toward degree completion.

The theology program plan focused most of the fourth-year student work on writing the dissertation and developing teaching plans. A cohort of seventeen students had completed their dissertation proposal defense the week before the planned theology-only camp. Some had finished earlier, and had already begun their research and writing process for the dissertation. At the beginning of the academic year, fourteen of the seventeen fourth-year students were on campus and able to participate in the camp. The general framework for the theology-only dissertation camp was the same as any other weeklong camp:

- Program sessions focused on early-stage dissertators,

- Consultations offered by graduate students from the University Writing Center,
- Panel presentations about challenges and successes with the dissertation process by fifth-year theology students, and
- Talks by theology subject librarian about available services.

At the end of the week, the theology students were happy to report that they felt they could be successful in writing their dissertations. Conversations with students completing their dissertation in the fifth year provided more anecdotal yet positive feedback. Several students commented that the camp was instrumental in their on-time dissertation completion.

The dissertation camp has developed a positive reputation over the years and is now considered to be an integral part of preparing doctoral students to be successful in their dissertations. In response to an initiative designed to incentivize students to complete their PhD programs within a five-year window, a new interdisciplinary dissertation professional seminar was planned for the 2017–2018 academic year. Up to twenty-eight students are admitted as a cohort to the program, and a weeklong dissertation camp will be included in their orientation activities. In addition to internal requests for more camps, colleagues at other institutions have reached out to discuss opportunities to provide similar support for their graduate students.

The camp framework is organic in nature, and it will continue to change and evolve. Feedback from students indicates that alternative camp experiences would be well received. Students have begun using the camp for large writing projects other than the dissertation, such as studying for comprehensive exams or writing dissertation proposals. The camps have become so popular that available seats fill quickly and a waiting list has had to be created. Many of the students on the wait list have expressed concern and disappointment when they are unable to get a seat in the dissertation camp. As a result of competition for seats in the dissertation camp, students are now required to apply, rather than just register, for the weeklong camps. A prioritization model was put in place in 2016–2017, which gives preference to those students who already have defended their dissertation proposal. Feedback indicates that the new application model is working well.

Hesburgh Libraries has aimed to provide a dissertation camp, along with other iterations, that meets the unique needs of graduate students. While students' experiences and needs will vary from institution to institution, this chapter can serve as a model to inspire other academic libraries to creatively support the holistic needs of doctoral students completing dissertations, while also strengthening partnerships with other campus support services.

ACKNOWLEDGMENTS

Camp organization and management is done in collaboration with a team that includes Laura Bayard, the undergraduate outreach librarian, and Matthew Capdevielle, director of the University Writing Center, along with a host of volunteers who cannot be thanked enough for their time and talent.

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Chapter Five

Money Smarts

Collaborating for Financial Literacy

Esther Gil

The importance of financial literacy is recognized at the highest levels in the United States. For example, in 2001, the Federal Reserve Bank of Chicago convened a meeting of over forty organizations from the Chicago area to “promote personal financial literacy,” which resulted in Money Smart Week 2002 (Money Smart Week n.d.), an event that continues to this day. Libraries also acknowledge the importance of financial literacy by providing programs on managing personal finances in their communities. Significantly, in 2014, the Board of the Reference and User Services Association of the American Library Association approved a document titled *Financial Literacy Education in Libraries: Guidelines and Best Practices for Service*. As noted in its introduction, it was developed as a result of a “growing need and demand for high-quality reference services and programming in the area of personal finance, investing, and other aspects of financial literacy” (American Library Association 2014, 1).

College students are a key focus of financial literacy discussions. An important trend that has affected this group is increases in tuition and fees to attend college. For example, net tuition and fees for public four-year colleges increased by 35 percent between FY2006 and FY2016 (in 2015 dollars), averaging \$3,980, and “average net tuition and fees in private nonprofit four-year colleges was \$14,890 in 2015–16, compared to \$14,700 in 2005–06” (College Board 2015a, 4). Students continue to borrow at high levels in order to meet college expenses, as well (College Board 2015b). Universities and colleges have delivered various programs to college students in the United States to improve their financial literacy. Some examples include optional finance sessions during freshman orientation (Kezar and Yang 2010); per-

sonal finance courses offered by departments in universities, such as Cooperative Extension programs and business schools (Cude and Kabaci, 2012); and financial advice provided by trained financial aid counselors (Kezar and Yang 2010). Cude and Kabaci (2012) reported that student offices such as student affairs and residence halls, as well as on-campus credit unions and banks, were also involved in providing financial education.

Academic libraries have also become involved in financial literacy education. Trevor Dawes made financial literacy his presidential initiative when he was president of the Association of College & Research Libraries (ACRL) in 2013, emphasizing the role academic librarians can play in this area. Dawes (2014, 326) believes that “because of their central role on campuses, [academic libraries] can design and deliver programs and resources that can impact their constituents’ lives.”

I am a business and economics librarian, and in 2014 first heard of Money Smart Week (MSW), a national program coordinated by the Federal Reserve Bank of Chicago along with national partners such as the American Library Association (ALA) and the Consumer Financial Protection Bureau. MSW seemed to be a good way to provide financial education to students at the University of Denver (DU). After receiving positive feedback from various contacts, including the business school, I created a planning committee made up of individuals from different campus units, including the Career and Professional Development Unit, the College of Business, the Office of Financial Aid, as well as undergraduate student government and graduate student government.

In this chapter, I will describe how in the latter part of 2013 I became involved with MSW, including implementation, collaboration, programming, scheduling, and marketing. I will also point out some of the changes that occurred from the time the first program was established at DU to the most recent one delivered in 2017. This event will be in its fifth year at DU in 2018.

LITERATURE REVIEW

Financial literacy has been a subject of discussion going back to the mid-to-late 1990s (Vitt et al. 2000), and both President Bush and President Obama signed executive orders to create programs to promote financial literacy: the President’s Advisory Council on Financial Literacy (PACFL) in 2008, the President’s Advisory Council on Financial Capability (PACFC) in 2013, and the President’s Advisory Council on Financial Capability for Young Americans (PACFCYA) in 2015. The morphing of the term “financial literacy” to “financial capability” within these plans reflects some of the complexity in matters involving financial education. The premise is that this type of

training will enable individuals to manage their finances effectively (Rogers 2015).

Changing and fluctuating economic conditions challenge individuals, including college students, when managing their finances. From 2011–2012 to 2015–2016, net tuition, fees, and room and board for undergraduates in private nonprofit four-year institutions has gone up by 29 percent, and by 17 percent for students in public four-year schools, even after considering grant aid (College Board 2015a). Decreases in state support for higher education have led to increases in tuition rates, shifting the burden of financing the cost of a college education to families and students.

Students have also continued to borrow significant amounts in order to meet college expenses: in 2013–2014, 61 percent of individuals who received bachelor's degrees from private and public four-year institutions were encumbered with debt (College Board 2015b). The Institute for College Access & Success (2015) reported that the average amount of student debt has increased by 2 percent, from \$28,400 in 2013 to \$28,950 in 2014. In addition, private loans—those made by banks and other lenders, and like credit cards, are the riskiest method to pay for college—made up about one-sixth (17 percent) of the debt held by the class of 2014 (Institute for College Access & Success 2015). Scammers also offer student loan consolidation schemes that have the potential to make debt more costly for students by moving federal loans to private loans (Farrington 2014). Furthermore, heavy student debt has the potential to limit graduates' career options, as they may take certain jobs just to be able to pay down their debt. This type of loan can also undermine a young adult's ability to save, build credit, and buy a home (Higher One 2015). Credit card debt is also problematic for college students. Willis (2015) cited a 2009 Sallie Mae study reporting that students used credit cards to pay for education-related expenses such as school supplies and textbooks, as well as non-education costs that included food and transportation. Thirty percent have even paid some part of their tuition with a credit card (Willis 2015). As students begin college, they are faced with new financial responsibilities, including paying tuition and fees, rent, credit card debt, student loans, and balancing work and school (Cude and Kabaci 2012). A Higher One (2015) report noted that there was a decrease in the probability that college students would engage in sensible financial behavior, such as paying credit card bills when they are due, checking for billing errors, saving, investing, and only buying the necessities.

Studies also have investigated the connection between financial education and a college student's well-being. Xiao, Tang, and Shim (2009) provided evidence that when college students engaged in positive financial behaviors, their financial satisfaction improved, which could contribute to life satisfaction. These results can guide development of interactive financial education training to provide students the ability to manage their finances skillfully,

which can potentially improve both their life and academic satisfaction (Xiao, Tang, and Shim 2009). Stein et al. (2013) reported that the college students in their study who actively learned and discussed the economic crisis with other individuals demonstrated more satisfaction with life and experienced less depression and anxiety. This suggests that financial education and outreach to students are important to their psychological well-being. Other research that examined the financial knowledge of college students have revealed that they might benefit from increased financial education (Rosacker, Ragothaman, and Gillispie 2009; Wang and Xiao 2009; Maurer and Lee 2011; Robb 2011; Limbu, Huhmann, and Xu 2012). Rosacker and Rosacker (2016) found that undergraduates majoring in accounting and business at a small university benefited from a set of four sixty-minute financial education programs. Friedline and West (2015, 662) indicated that Millennials might engage in healthier financial behaviors if they are provided with both “financial inclusion and financial education.” They suggested that opening a savings account and teaching students about the necessity of building savings was one such method.

Academic librarians have engaged in financial literacy efforts to help college students. Graves and Savage (2015) presented their examination of essays written by students in financial education classes at a community college. Their findings showed that “duration of scarcity” or “long-term financial scarcity,” as well as “family financial socialization,” could affect students’ abilities to apply financial concepts (Graves and Savage 2015, 130), and suggested that the type of information gathered can help librarians target the correct student segments and thus make financial education programming more efficient and effective. Bowen and Rizk (2015) described two collaborations in which the library provided and supported financial education programs for its university’s population. Reiter (2015) described her library’s partnership with the Student Financial Education Center, which runs a peer-to-peer financial education program at her institution. Li (2012) taught a one-credit-hour course during the fall 2010 semester for a first-year seminar on financial literacy, and covered a wide range of financial topics, including managing checking and savings accounts, handling student loans, spending smartly, and setting budgets. In another example, Roggenkamp (2014) explained that the workshops he delivered to a community college audience included how to find financial resources and services provided by the library. Jagman and colleagues (2014) presented company research strategies during their university career center’s Career Week program and collaborated with the Financial Fitness Program to promote financial literacy as part of Money Smart Week. Eisler and Garrison (2014) suggested that by developing strong relationships with those campus units and divisions that are dealing directly with the economic challenges students face, such as debt, librarians can play a role in helping to solve this problem. Gil (2015) ex-

plained how she became involved in and collaborated with several units on campus to bring Money Smart Week to her university.

Motivated by the research literature that demonstrates how financial literacy can have a positive effect on students, as well as word-of-mouth and anecdotal evidence indicating that college students need financial literacy, in 2014 I led the way to highlighting financial literacy on the DU campus by engaging in Money Smart Week and collaborating with other campus units to do so. The library has continued to participate in Money Smart Week since 2014.

BACKGROUND

Founded in 1864, the University of Denver is a medium-sized, privately held academic institution with an enrollment of 11,614 students—5,754 undergraduates and 5,860 graduates (Institutional Research & Analysis 2017). DU offers bachelor's, master's/educational specialists, juris doctor, and doctoral degrees through fourteen academic units. The latter is made up of nine professional programs, two for nontraditional students, and the remainder are liberal arts programs.

I learned about Money Smart Week in mid-November 2013. MSW is sponsored by the Federal Reserve Bank of Chicago, and the American Library Association is a major participant. This event is held nationwide on eight consecutive days in April and libraries, educational organizations from K–12 to higher education, community groups, government agencies, financial institutions, financial experts, and others present on topics designed to improve the personal finance knowledge of their target audiences (Money Smart Week n.d.). I also learned that undergraduates at my institution were interested in financial literacy. After receiving feedback from DU colleagues that providing such a program would be beneficial, I began to work on bringing Money Smart Week to the DU campus beginning in 2014. My supervisor, reference colleagues, and the library administration supported these efforts, which included taking the time to plan the program; making library resources available, including staff and material to help with public relations efforts and audio-visual support for speakers; and providing funding for refreshments and advertising.

I also believed it was important to collaborate with other campus units, such as the Daniels Career Services (located in the College of Business), the DU's Career and Professional Development, the Office of Financial Aid, and others, to plan, implement, and market the event. Various articles discuss collaborating with staff outside the library in order to meet different goals. Faculty/librarian partnerships related to information literacy are particularly robust (Finley and Waymire 2012; Ford et al. 2015; Kirkwood and Evans

2012; Strittmatter 2012; Whitesell and Helms 2013). Other examples include participating in a university's faculty-in-residence program and offering library-related services in the dormitories (Strothmann and Antell 2010), collaborating with student services and providing programming to help new students adjust to their university environment and learn about library resources (Eads, Freeman, and Freeman 2015), partnering with other campus units in order to reach audiences outside the course-specific environment and provide them with library instruction (Love and Edwards 2009), and connecting with student organizations to inform them of the resources and services that the library offers (Johnson et al. 2011).

After reaching out to several units on campus, in 2014 I formed a planning committee made up of the project manager from the College of Business; the associate director of the Daniels Career Services; the marketing and events manager and the assistant director for DU's Career and Professional Development; the custom service coordinator for the Office of Financial Aid; and student representatives from both the undergraduate and the graduate student government.

Since the MSW 2014 event was the first one in which DU participated, one of the steps I undertook was to investigate what other academic libraries who participated in MSW had done in the past, which I then shared with the planning committee in order to establish the goals for DU's MSW. During meetings, the team established what it wanted to accomplish, identified programs to offer, and divided up tasks. One of the main goals was to deliver sessions that covered the issues college students were dealing with, such as student loans and managing their credit. The planning committee also wanted to attract students who did not study business and use advertising channels that would reach a broad audience.

IMPLEMENTATION

In 2014, the planning committee identified programs on eight different topics (two sessions offered twice), including a keynote speaker, and divided up responsibilities for the events. Sessions were to be held Monday, April 7 through Friday, April 11.

As coordinator of the planning committee, I registered the library and the participating units as MSW partners on the national website and shared the *Money Smart Week Partner Kit* with committee members. Important components from this document included a definition of a partner, what partners agreed to do, and the guidelines for participating. Some of the responsibilities included delivering educational programs related to improving personal financial knowledge, promoting them locally, and registering them on the Money Smart Week online system. MSW organizers strictly prohibit com-

mercial marketing and sales pitches (Federal Reserve Bank of Chicago 2016). This was an important message to relay to presenters, many of whom came from the local financial community. The *Partner Kit* also provided a host of material and best practices to help local organizers planning events for the week, including a feedback form, templates that could be incorporated into flyers and posters, media and promotion tips, and other advertising advice. I created the local MSW website using the library's LibGuides subscription, developed an online form for individuals to register for events using Qualtrics survey software, and generated a blog post about the MSW events. I also provided a session about the financial education sources available in the library as part of the MSW programming.

The project manager from the business school interfaced with Delta Sigma Psi, the business fraternity that sponsored keynote speaker Adam Carroll, a well-known financial literacy author and trainer. This event was held during a two-hour time slot on Tuesday. His presentation covered a wide array of topics, including budgeting, student loans, entrepreneurial opportunities, and retirement, and delivered the information in an entertaining way. Delta Sigma Psi's sponsorship meant that fees for the keynote speaker—which totaled several thousands of dollars—as well as the cost of refreshments did not need to come from library funds. The fraternity required its members to attend the keynote address, thus helping to ensure it had good attendance. The project manager also created the online invitation form that individuals used to register for this session.

The associate director of the Daniels Career Services, who has various connections in the community, arranged sessions with presenters and advisors from banks, a credit union, a financial advisory service, and a small business entrepreneur. Each of these sessions were scheduled for one hour and dealt with the following subjects: budgeting and spending, credit and debt, investor education, owning a business, and paying for education. He also identified financial advisors from local institutions who provided one-on-one advice during a consecutive four-and-a-half hour period on Friday.

A large number of committed team members across the campus coordinated advertising and promotion. For example, the marketing and events manager from Career and Professional Development designed the poster and flyer templates that the MSW planning committee used to advertise events, and she utilized the poster logo included in the partner materials provided by the national Money Smart Week organizers. The Office of Financial Aid's customer service coordinator worked with the head of the office to provide two \$250 book scholarships that were raffled at the keynote event, and \$100 book scholarships raffled at each of the other events. He also arranged for a group of undergraduates in the DU Pioneer Student Money Management Program to present. The students and other members of the planning committee placed flyers around the campus, including dorms, classroom buildings,

and DU's student center. They also sent out emails promoting MSW events to their unique communication networks.

I attended all of the events to ensure that each presenter had the equipment and information required for the sessions. MSW planning committee members responsible for identifying a speaker attended the relevant sessions, and other members of the planning team were also on hand to help. During the Adam Carroll keynote address, for example, the College of Business project manager and members of the business fraternity handed out and picked up the feedback forms attendees filled out for the event. The associate director of the Daniels Career Services attended the events for which he had arranged a speaker to ensure that each had what was needed.

Collaboration also occurred within the library. Of critical importance was partnering with the library's public relations (PR) committee chair. Together she and I came up with a PR timeline with dates to complete tasks, and also identified who was responsible for each task. The PR facilitator produced and distributed the posters and numerous flyers around campus, designed a splash ad about the university's Money Smart Week events for the library's home page, created a digital sign to be displayed in the library, and wrote and distributed messages via the library's Facebook and Twitter feeds. She also contacted individuals in different academic units, such as the DU Library and Information Science program and the College of Education, as well as those in non-academic departments, including the university chaplain and staff working with students from traditionally underrepresented groups and international students, to get the word out through their student email lists.

The PR chair also worked with the university's marketing and communication division to advertise MSW to students via their promotional avenues, including email and social media. She also took photographs of the various programs on the day these were held for future advertising.

In another example of internal collaboration, I contacted the appropriate library supervisors to request assistance from library student workers on the event days to distribute and pick up raffle tickets for the book scholarships, take photos when the library's PR facilitator was not available, and perform any other tasks that might arise. I also worked with staff to schedule rooms for events, coordinated with the appropriate library personnel to set up the event spaces for the keynote speaker and presenters, and arranged for the videorecording of the keynote presentation. I also collaborated with the library's budget officer to obtain the funding to purchase items such as balloons for advertising and extra refreshments offered at individual sessions.

ASSESSMENT

Since the initial launch of Money Smart Week in 2014, I have coordinated programs every year since then, collaborating with many of the same external and internal partners to plan, market, and assess the annual event. Gathering feedback at all the Money Smart Week events delivered at DU was a high priority. The *Money Smart Week Partner Kit* included a one-page consumer satisfaction survey for attendees to fill out at the end of each session. I submitted the completed forms to the national MSW organizers via SurveyMonkey, which they in turn use to assess all the programs delivered in the United States. I also entered this information into the Qualtrics survey software to be analyzed for local use. Two of the questions included in the feedback survey were:

1. How valuable did you find the Money Smart session you just attended?
2. How likely are you to apply or take action on something you learned in today's class? (Federal Reserve Bank of Chicago 2014, 18).

In 2014, 100 percent of respondents answered either "valuable" or "very valuable" to the first question, and 94 percent answered either "likely" or "very likely" to the second. The planning committee was pleased that the responses were very positive and attendees were satisfied with the sessions. These two queries also generated positive replies for the Money Smart Week programming delivered in 2015–2016.

In 2017, the national organizers of MSW changed the survey, and the two questions were slightly revised:

1. How would you rate the value of your Money Smart Week program to your overall financial knowledge? (Federal Reserve Bank of Chicago 2017, 15).
2. Will the information provided during your Money Smart Week program prompt you to take action in your financial activities or planning? (Federal Reserve Bank of Chicago 2017, 14).

Once again the answers were favorable, with 87.5 percent of respondents finding the quality of the information they received either extremely or very valuable; 61 percent definitely planned to take action or change their financial behavior, and 30 percent possibly taking action.

The surveys included in the *Partner Kits* also had a question about public relations, and the data gathered from 2014 to 2017 showed that attendees primarily heard about events offered via email from a variety of sources. This included email from undergraduate student government, the College of Busi-

ness, the library, graduate student government, resident assistants, undergraduate events, graduate student communication channels, and from individual academic units. Other ways attendees learned about the events were from posters and flyers in the library and other campus buildings, instructors, word of mouth, and social media accounts operated by various units.

The surveys supplied by the national MSW organizers lacked certain demographic questions that I believed could be useful. Consequently, the following questions were included in MSW supplemental feedback forms for 2015 through 2017.

1. What is your primary university affiliation (e.g., undergraduate, graduate)?
2. What is your major?
3. What is the most important thing you learned in this session?

I also gathered student input to determine the types of financial education programs to include in Money Smart Week 2015, 2016, and 2017. This was accomplished by displaying a 20" x 30" poster, listing a number of events from which students could select, in a highly traveled area in the library during a very busy week. The topics on the poster included those that the national MSW organizers identified as popular, as well as those that past attendees indicated were of interest. A fill-in-the-blank option was also offered for additional suggestions. Throughout the years, topics of interest to students include investments and personal wealth, dealing with student loans, budgeting, salary and job negotiation, starting a small business, and eating well on a budget.

In the years that the business librarian has planned these MSW events, individuals from various campus units have participated and, for the first time in 2017, a person outside of the university became involved. She was from one of the state's regulatory agencies, and brought with her a new source for potential speakers. Non-library units have been crucial in developing the programs that were delivered from 2014 to 2017.

LESSONS LEARNED

I learned several things from spearheading Money Smart Week at the University of Denver. First, because the event week comes very rapidly, it is important to be on top of the planning and PR efforts. The timeline identifying when each PR item must be completed and by whom is invaluable, such as the completion of poster and flyer templates for printing and distribution four weeks before MSW events begin. The deadline for posters and fliers guides other action items, such as when events and presenters need to be

determined in order to have them listed on the various advertising material. A timeline also helps if, for some reason, a key player will not be able to participate. For instance, in 2016 our PR committee chair was on sabbatical during the spring quarter, and the timeline helped her backup staff accomplish what needed to be done while she was away. It is also helpful to create a document with the various blurbs the MSW planning committee has sent out and to whom, as this saves time over the years because the messages to be delivered do not need to be re-created.

Second, planning and implementing Money Smart Week is time consuming and requires the main event coordinator to restructure day-to-day job responsibilities. I needed time to obtain background information about MSW, review messages sent out by national MSW and ALA organizers on topics such as what has worked in academic and public libraries, to set up and prepare for meetings, to guide the MSW planning group to strategize and implement the full program and related promotion efforts, to ensure that everything went according to plan each day of the events, and to follow up with required activities after MSW ended, such as entering the feedback gathered into SurveyMonkey for the national organizers. Advanced planning is necessary, as I had to accomplish these tasks in addition to the regular duties of a business and economics reference librarian. Library staff time also went into this effort, including those of the library's PR committee chair, the audio-visual technology services team, and others. Consequently, it is important to get supervisor, colleague, and library administration support. In addition, staff from the other campus units needed time, not only for attending meetings, but for the efforts they made to accomplish each of the tasks they agreed to do. The importance of financial literacy for students on our campus is regarded as so essential that everyone involved is dedicated to making MSW an annual success.

Third, data-driven decisions must be made, and can be accomplished by inputting information into a software package that allows the data to be analyzed. As an example, for future MSW programming, attendance figures and feedback on the consumer survey forms can be put into Qualtrics and analyzed in order to learn which sessions were popular, the demographics of those who attended, and which marketing strategies worked best. The MSW national organizers also provide data gathered from public and academic libraries that had MSW events, which can help guide local programming efforts.

Fourth, it is very important to collaborate with others in order to bring Money Smart Week to fruition at a university or college. For instance, there are units on campus that regularly deal with students having financial issues, and that are dedicated to helping them resolve these issues. They are also interested in taking proactive steps to provide financial education to help students navigate their finances successfully. These are potential partners

that a librarian should seek out if he or she plans to engage in a program such as Money Smart Week. At DU, the Bursar's Office, Daniels Career Services, the Office of Financial Aid, the University's Career and Professional Development Unit, and U.S. Bank have participated over the years, and have been invaluable in planning Money Smart Week since it was launched in 2014. They have helped to identify program topics, reached out to potential speakers, provided incentives to give out to attendees, developed marketing material, and helped to advertise through their student email lists and other mechanisms available to them. At DU, having students on the committee is also very important, and they are also interested in bringing financial education to their peers. They not only offer good ideas on what topics could be successful, but also have PR suggestions. Agencies or organizations in the community are also potential partners; for example, in 2017 the Consumer Education and Public Outreach Coordinator for the Colorado Department of Regulatory Agencies, Division of Banking/Division of Financial Services, joined us. Providing financial education to students is important to her, and her connections allowed her to identify several topics and participants for the programming we delivered.

CONCLUSION

The literature has revealed that economic issues are impacting college students in negative ways and that their level of financial knowledge is low, but also indicates that financial education can improve students' financial literacy and well-being. It has also shown that academic librarians have become involved in providing financial education using various methods, and Money Smart Week is one way of doing so. At DU, the business librarian has organized this event since 2014, collaborating with both on-campus and off-campus partners who also believe that providing financial education to students is important. Engaging in this event also demonstrates that University Libraries can make a positive contribution to helping students improve their financial knowledge, potentially leading them to engage in more positive financial behavior, which in turn can have a positive effect on both their academic and financial health. When the library takes the lead in initiatives such as this, it demonstrates to the campus that librarians are committed to supporting all types of literacies, and strong partnerships across campus units in such endeavors help students realize that the institution is dedicated to supporting all aspects of student success.

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Chapter Six

Library Outreach and Campus Communication Using a Digital Signage Platform

The DIVo Project

Toong Tjiek Liauw (Aditya Nugraha)

This chapter discusses the inception, planning, implementation of, and lessons learned from a campus-wide digital signage project, called DIVo (Desa Informasi teleVision), at Petra Christian University in Surabaya, Indonesia. The project was initiated by the university's library and provides a case study on how a substructure project, such as a digital signage network, can serve as a nontraditional outreach initiative for an academic library. While some technical aspects are mentioned, the chapter will focus largely on the nontechnical aspects of the project viewed from an academic librarian and academic library's outreach perspective, including how the technology has been used to augment the library's digital content recruitment workflow.

LITERATURE REVIEW

Information and communication technology (ICT) has grown rapidly since the invention of computers and only has accelerated with the emergence of the Internet. These advancements in ICT have influenced and brought many changes to libraries, especially academic libraries. New generations of students who have been immersed in these new ICT-related inventions and gadgets since early childhood are also coming to colleges and universities. In his highly cited article, Marc Prensky (2001, 1) coined the term "digital natives" to "represent the first generations to grow up with this new technol-

ogy.” Although he did not mention any particular year as a starting point in defining the digital natives (DNs) generation, he did suggest the starting point to be in the 1980s. These digital natives are now in college, and some have graduated or are in graduate-level studies.

In order to better serve the DNs, universities and academic libraries need to understand their characteristics. A defining characteristic of DNs is their preference for graphics over text (Prensky 2001, 3). Diana Oblinger and James L. Oblinger (2005, 2.14) described the “Net Generation” (referring to the DNs) as “more visually literate than earlier generations,” which means that “they are comfortable in an image-rich rather than a text-only environment.” Peter Felten (2008, 60) made a similar assertion when he said, “Our visual, screen-based world is the natural environment for many of today’s college students.” Citing previous studies, Kate Manuel (2002, 205) described two main characteristics of Generation Y (again, referring to the DNs): “low thresholds for boredom” (citing Garry 1996, 87–90) and “short attention spans” (citing Rifkin 2000, 87–90). Manuel’s assessments seem to be in agreement with Prensky’s (2001, 4) statement that DNs “thrive on instant gratification and frequent rewards” and “prefer games to ‘serious’ work.”

As institutions with special concerns for promotion and outreach efforts, academic libraries should be informed about this visual characteristic of DNs, particularly when designing their outreach strategies. Many academic libraries established their online/web presence in the Internet era, and later supplemented it with a social media presence. The University of California, Los Angeles (UCLA) Powell Library reported that it “maintains a presence on four social networks—Facebook, Twitter, Pinterest, and Instagram” and found Instagram to be “the place where we have the most rewarding interactions at the moment,” based on the observation that its “Instagram followers tend to be highly engaged and attentive to [library] content” (Salomon 2013, 408). Although the article did not investigate further why Instagram was the most effective platform for the library’s social media presence, an educated guess can be made that its followers’ high engagement and attention can be attributed to Instagram’s visually rich character. Rice Library (University of Tennessee at Chattanooga) and Roesch Library (University of Dayton) have also reported successful use of Instagram as a “visually stimulating and dynamic” social media platform to reach out to their students (Tekulve and Kelly 2013). Recently, a growing number of academic libraries have also started to utilize a relatively new, visually appealing medium called digital signage.

Digital Signage Technology

Digital signage (DS) refers to a set of ICT that involves the use of flat-panel screens, a data network (cable-, Wi-Fi-, or mobile/cellular-based), and web-based software to control displayed content (Kelsen 2010) and media-player devices, either attached to or integrated into the screens. Content comes in a variety of formats including text, image, audio, video, animation, and augmented reality. A web-based digital content management system, working in tandem with the media-player devices, does a variety of manipulations to this content, including partitioning the screen into zones, displaying or playing the content onto different zones, scheduling, updating, and even providing some level of customization and interactivity. Jimmy Schaeffler (2008, 39) mentioned that DS is “intended to be particularly relevant and helpful to consumers aimed largely at out-of-home audiences who are frequently moving from place to place, yet are often held ‘captive’ by a particular situation, event, or environment.” The most ubiquitous use of DS, with the emphasis on disseminating information, is the travel information that we see at airports or other transportation hubs.

Besides being an emerging technology, digital signage is also a medium that is capable of seamlessly blending a number of different technologies, such as barcode, radio frequency identification (RFID), cellular, Wi-Fi, computer vision, gesture technology, and augmented reality. This capability brings together information from various sources and/or media, as well as provides customization and interactivity, which can then transform—and possibly even augment—the information by providing a graphically rich visual experience to the viewers.

Two initial industries that have powerfully utilized DS are advertising and retail. These industries have been intensively using DS for various functions, such as attracting and directing shoppers or passers-by, creating a “comfortable and relaxed atmosphere,” assisting customers with “purchasing decision-making,” enhancing corporate communication and training, offering an advertising platform, and reducing shoppers’ perceived wait times at point-of-sale locations (Planar Systems 2006, 2–3). Besides the functional approach as mentioned above, DS can also be understood from a form perspective, which views DS as a tool “to deliver content that falls primarily into four distinct (but often overlapping) forms: commercial, informational, experiential, and behavioural” (Schaeffler 2008, 14).

Companies have been experimenting with combinations of some or all of the above functions of DS to grow their business, enrich customer experience, and strengthen their brand image. Some notable innovations include Pizza Hut’s interactive in-store table (“Pizza Hut” 2014); Nike’s novelty signage that gave people the “taste” of speed by creating the illusion of movement using big screens (Hall 2012); Ford’s kiosks that let customers

interact with products in augmented reality (“Ford C-Max” 2011); Coca Cola’s “Drinkable Advertising” (“Coca Cola” 2015); and bus shelters that were transformed by Pepsi to provide delightful entertainment through an innovative blending of reality and augmented reality (“Unbelievable Bus Shelter” 2014). DS has also become an industry of its own; it has its own trade shows, with the Digital Signage Expo as the “largest and longest-running trade show, exclusively dedicated to showcasing innovative digital communication and interactive technology solutions” (“Kinetic” 2015).

Further developments have blended DS into the very fabric of architecture itself, and have given rise to architectural media, which Lyle Bunn (2009, 1) defined as “the integration of static or dynamic media with physical infrastructure to provide a compelling, high impact experience in which the brand is clearly and powerfully expressed and communications goals can be more fully achieved.” In response to this architectural media trend, some DS companies have launched a new product line known as architectural video wall display (Planar Systems 2014), which is the use of large screens—usually consisting of smaller tiled screens—as part of the architectural feature of buildings. Some researchers have even asserted that DS “is a promising way to augment the everyday stage and make it more flexible and engaging” with most of its market growth—20 percent in 2013—in “public or semi-public spaces” (Kuikkaniemi et al. 2011, 41). *Solar Reserve (Tonopah, Nevada) 2014*, a public art installation by Irish artist John Gerrard at New York’s Lincoln Center, is perhaps one example of the use of DS to create a more engaging and invigorating public space (Hall 2014). Universities and libraries, which to a certain extent can also be considered public—or at least semi-public—spaces, are well positioned to seize the opportunities presented by DS technology.

Utilization of Digital Signage in Universities and Libraries

There are a variety of DS applications in higher education—and libraries in particular—which are mostly inward, internal, and stakeholder-directed. Approached from this point of view, DS “can be an incredibly effective tool in communicating with employees [and students] about everything from . . . [campus] news and policies to the latest products and offers,” and can help to “create a common experience that, over time, can impart corporate values and practices to employees” (Kelsen 2010, 10, 37). DS has obvious advantages over print-based media in that it saves money, provides engaging content and real-time updates (Jonson 2016), and is environmentally friendlier. DS can be used—as appropriately indicated by its name—for signage or wayfinding in the physical space of libraries and campuses. The use of DS for wayfinding in physical space has obvious advantages over analog or printed materials. The wayfinding information in DS is dynamic, meaning

that it “can be automatically updated to reflect the latest changes in the physical landscape” (Fox 2015, 155). The dynamic nature of DS translates into timely information delivery. Wayfinding information displayed on the screens can be updated in seconds, including updating information on closures or detours caused by maintenance or repair work. In terms of the architectural video wall display, Yale University’s School of Management has created a visually appealing architectural media, integrating its information-rich video wall displays into the interior architecture of its building (Society for Experiential Graphic Design 2015). Finally, some libraries have been using DS for advertising or promoting their programs and events (Smith and Baker 2011, 637), or integrating it as part of the library’s information commons facility (Seal 2015, 567).

Academic libraries are well positioned to spearhead DS projects due to their role in collecting, managing, and disseminating vast amounts of content or information, and their nature as the campus community hub. The types and amount of information held in libraries (not only collections, but also data on circulation and digital resources usage) make them good sources of content for DS. Combined with other sources of content from different campus units—especially the public relations office—and various campus communities, academic libraries can play a role as an advocate of DS as a campus information and communication channel. The following sections discuss the experience of one academic library in initiating and managing a campus-wide digital signage project.

DIVO PROJECT: THE PILOT PHASE

DIVo is a campus-wide DS project initiated by the library at Petra Christian University (PCU), a medium-sized private university located in Surabaya, the second largest city in Indonesia with 2.853 million inhabitants (Badan Pusat Statistik 2017), in the East Java province. The University has 8,455 students who are mostly undergraduates, and a centralized library with 170,260 physical volumes and 295,224 digital objects in its institutional repository (Petra Christian University Library 2015). The repository, *Desa Informasi*, contains published works as well as gray literature. Although the repository is not the only source of content for the DS network, the DIVo name—which contains the words “*Desa Informasi*”—reflects the library’s initial intention to feature its visual-based repository content through the DS network.

The embryo of the DIVo project was conceived in 2008 when the library initiated a pilot project, which was considered to be an effective approach since earlier attempts to propose a full-scale (campus-wide) project were not successful due to several factors. First, DS was a very new ICT develop-

ment—at least in Indonesia—at the time, which made it difficult to advocate. Second, the amount of funding required for a campus-wide installation of DS was quite significant. Third, the budgeting system at PCU required that all costs associated with any project would have to be allocated to the annual budget of the department/unit that proposed the project. These factors had made it almost impossible for the library to propose a project with a significant amount of funding, especially when it could not yet present any benefit or impact analysis of the proposed project. Thus, a different strategy was needed.

A pilot project offered a tangible model that could be used as proof of concept as well as provided initial data that the library could use to advocate for the wider implementation of DS on campus. For the pilot, the library installed two DS screens, one inside the library and one at a student gathering place (a semi-open space) near the elevators that people use to reach the library, which occupied the fifth to eighth floors. The screens used were 52” consumer-grade flat-screen TVs and were installed in landscape mode. The screen inside the library was placed at a height of approximately 1.8 meters in a high-traffic space near the library’s circulation area. The other screen was placed at a height of approximately 3 meters in a semi-outdoor area where students gather to meet their friends, converse or discuss, or do their assignments. The technology used was the broadcast type, which required:

- A DS server producing a single video signal displaying the combined content from different media (text, image, video, animation, etc.) that had been assembled by the content manager software into different zones of the screen
- A converter (video over Cat5/6) for converting the video signal to a data signal that can be transmitted using a data cable
- A dedicated Unshielded Twisted Pair (UTP or Cat5/6) cable network installed as a separate network from the cable data network used for intranet and/or Internet
- A (de)converter to convert the data signal back to a video signal to be displayed on the screen(s).

This technology meant that the same display was being broadcasted to both screens without the ability to do any segmentation based on location. The broadcast technology was chosen because it was an affordable choice for the pilot since it did not involve a DS player device, which is much more expensive than a pair of video-data signal converters.

The screen display was divided into seven different zones, each displaying different media (scrolling text, ticker text, static images, dynamic images, and video) with the video zone used mostly to feature documentaries or short promotional videos from various campus units (figure 6.1). The screen zon-

ing arrangements were based on the assumption that the more content displayed simultaneously, the better—and more appealing—the screen would be. In hindsight, this assumption was probably influenced by television programs, where television stations present several different types of content or information simultaneously on the screen. This content could include video of a news anchor, running text displaying other news, stock market or weather information, and even a picture-in-picture (or video-in-video).

Lessons Learned from the Pilot Project

Many valuable lessons were learned from the pilot phase of the Divo project. First, the placement of the screens was a crucial factor. It was initially assumed that the screens were best placed in areas where people congregated in relatively large numbers. This was not necessarily true, as the type of activities that people engaged in seemed to take precedence over the mere number of “potential” viewers. Viewer proximity to the screens was another unforeseen factor in this pilot phase. Kelsen (2010, 13–37) touched on these aspects by defining several different “types of networks” for DS installation,



Figure 6.1. Pilot phase of the Divo project. The screen was divided into seven different zones including an upper zone with elements of (left to right): static image, video, and scrolling images plus text; a middle zone with ticker text; and a lower zone with elements of (left to right): dynamic images from institutional repository, static image, and scrolling text. *Photographer: Toong Tjiek Liauw*

namely, “Point of Transit, Point of Sale, and Point of Wait.” Viewers in each type of network have different characteristics that need to be taken into consideration when planning a DS network, and screen proximity to the potential viewers should be carefully considered in each scenario. Second, DS is a completely different medium than television, which means that having more content displayed simultaneously on a DS screen does not translate into better (i.e., more informative) or more attractive displays, especially when pieces of content are not related to one another. Simple surveys conducted by library staff by interviewing viewers on the spot revealed that too much information and too many bells and whistles only distracted—or even confused—the viewers.

Some oversights discussed above might help explain Divo’s lack of effectiveness as a communication medium. Two undergraduate students from Pattimura University studied the current layout of Petra Christian University Library’s circulation and entrance area by conducting a three-day field observation. During the planning phase of the study, the library staff intentionally asked the students to include observations on the Divo screen inside the library. In their report, they described some findings, shown in table 6.1.

Some interesting facts emerged in their report. The study did not mention whether the people stopping and paying attention to the screen were different from the ones looking at it while walking. Based on the context of the study, we can safely conclude that both—the number of people who stopped, then looked at the screen, and the number who looked while walking—were mutually exclusive. Thus, we could add both averages to come up with 124.7 people per day “reached” by the Divo screen—22.7 percent of the average of 549.7 people who passed by the screen every day. Another interesting fact was that the number of people stopping and paying attention to the screen

Table 6.1. Head count of People Traffic and Divo Screen Audience in the Petra Christian University Library, Based on Field Observation on September 3–5, 2008, 8:00 a.m.–4:00 p.m. (Utama and Samallo 2008, 62–64)

	Head count of People Traffic							
	Sept. 3		Sept. 4		Sept. 5		Average	
	#	%	#	%	#	%	#	%
Number of people passing by the screen	557	n/a	537	n/a	555	n/a	549.7	n/a
Number of people looking at the screen while walking	67	12	43	8	55	9.9	55	9.97
Number of people stopping and paying attention to the screen	83	14.9	53	9.87	73	13.15	69.7	12.64

was greater than the number looking at it while walking. The study also mentioned that some students apparently came to the library just to watch the DIVO screen. These students had been observed coming into the library, heading directly toward the screen, watching what was on display for some time, and then leaving the library afterward (Utama and Samallo 2008, 68). This study was very limited in scope—studying one DS screen between 8:00 a.m. and 4:00 p.m. for only three days—and was conducted by undergraduate students, who were still practicing their research skills. Thus, the study should be taken with a grain of salt. As a comparison, a study measuring the “effectiveness of a mall-based digital signage network” conducted “over a three-month period in five designated market areas” found that “[o]f the average daily traffic of 4,281 shoppers, 17.1 percent paused to look at the displays” (Burke 2009, 4). It is interesting to compare the “reach” (people who paused or stopped to view the DS screen) of signage at a mall in this study (17.1 percent) to Utama and Samallo’s 2008 study (12.6 percent) for, with a difference of only 4.5 percent, the statistics are comparably similar.

On realizing that studies on existing DIVO play a crucial role in advocating for its campus-wide implementation, the library strongly suggested that faculty (researchers) encourage the adoption of DS as a research topic, either by themselves or with their students. Providing examples of possible research topics on DS was essential because most researchers did not have sufficient background knowledge on DS, as it was very new at the time. In this context, the existing pilot DIVO screens helped tremendously, for they provided a tangible case that helped the researchers to have a better understanding of DS both as a new technology and as a communication medium. Informal or personal approaches proved to be very effective, although the library needed to focus its outreach efforts to certain academic departments with the highest potential to contribute, namely, the departments of Visual Communication Design, Interior Design, Architecture, Communication Science, and Industrial Engineering Management. These efforts resulted in a number of studies. One study—conducted by Milka Jacobus, an undergraduate, and which resulted in her 2010 thesis—included interviews with twenty undergraduate students in an effort to better understand the information needs of students that can be facilitated through DIVO. Based on the interviews, her study found that:

- 85 percent of respondents thought that DIVO had not succeeded in becoming an effective information and communication medium on campus, but that it had the potential to be one if the number of screens could be increased and relevant content could be better prepared and presented (77–79).

- The “newness” factor of the DS technology managed to invoke positive perception among 90 percent of respondents, regardless the “usefulness” factor of DIVo (92–93).
- 80 percent of respondents believed that DS technology could be a future alternative for traditional print-based media, such as posters and flyers (96).

Respondents also recommended locations where DIVo screens should be installed. The study has limitations in that the author only interviewed students from several academic departments, who spent most of their time on campus in a particular building (T Building, Faculty of Economics and Chinese Language Department).

The disparity between what the librarians and the students thought of DIVo was also reported by a third study, which was also conducted as an undergraduate thesis project. The study measured the library’s service-quality gap using SERVQUAL, a service-quality model that uses a “multiple-item scale for measuring consumer perceptions of service quality” (Parasuraman, Zeithamil, and Berry 1988). Based on a random sample of one hundred students, the study measured several aspects of the library’s collections, services, and facilities. DIVo was included as one of the library’s services being measured. With respect to DIVo as a tool for information dissemination and library promotion, the study author made several recommendations (Alzameindi 2013):

- DIVo was something important to have, although students did not really need it (23, 35).
- Students’ perception of service (satisfaction) was below students’ expectation (33).
- Students were aware of the presence of DIVo, but have not felt its impact (46).

The studies discussed in this section seem to indicate that DIVo had not managed to succeed in becoming an effective information and communication medium. However, the campus community still perceived DIVo positively due to certain characteristics, namely, its newness, visual appeal, and its appeal as an alternative to print media. These advantages, along with the lessons learned from the pilot phase, supported the library’s goals of further developing DIVo in order to reach its optimal state as an effective information and communication medium.

THE DIVO 3.0 PROJECT

Although the above-mentioned studies were limited in scope and depth, they, along with observed trends in the use of DS in retail businesses in malls, provided the library with invaluable input for planning and implementing the DIVo 3.0 project. The name “DIVo 3.0” was chosen deliberately to create a sense of freshness after the pilot DIVo project, which had operated for more than five years before DIVo 3.0 was launched in October 2013. Securing funding was the main reason it took more than five years to launch DIVo 3.0. It finally came to fruition due to the library’s success in convincing the PCU president of the benefits and impacts of campus-wide DS implementation, and the fact that the president managed to negotiate with the PCU board of trustees to enact a special projects period. Under this special projects period scheme, campus departments/units could initiate substructure or infrastructure projects that would otherwise have not been possible due to existing budget limitations for each department/unit.

The DIVo 3.0 project was much more ambitious than the pilot phase, with an installation of thirty-nine units of 46” screens across campus. Thirty-one of these were designed as mobile units, which could be moved to different locations if needed. Eight were designed as stationary units, either attached to walls, pillars, or immovable furniture. Three of the units were used as campus directories, and were equipped with touch screens to facilitate interactions. Most of the screens were installed in portrait orientation, with only two—campus directories—installed in landscape orientation. Locations for screen installations were carefully selected based on field observations by and recommendations from the PCU’s Properties Planning Unit. During the planning and execution phases of the project, the library was assisted by a taskforce consisting of representatives from this unit plus the Properties Maintenance Unit, Purchasing Unit, and the Computer Center. In terms of a software platform, a web-based system was adopted, consisting of content management software and DS player devices with built-in player software. This platform enabled segmentation, capable of displaying different content on different screens based on unit locations and/or time of day.

Lessons learned from the pilot phase led to the adoption of a different approach in terms of content for DIVo 3.0. It was apparent from previous studies that inclusion of long-duration videos—such as documentaries—was not suitable for DS screens, because the audience was almost always on the move or engaged in other activities. It was decided that a digital poster concept should be adopted, which meant that instead of populating each screen with a variety of different content, each screen would display only one primary content item that mimicked traditional print-based posters. This digital poster approach was also influenced by observations of DS use in the



Figure 6.2. Wall-mounted unit of DVo 3.0, installed beside the elevator of W Building. The screen on the left is a DS screen, and the one on the right is an analog or print-based backlight poster of the building directory, which can be converted into another DVo screen if needed. *Photographer: Toong Tjiek Liauw*

retail business (malls). In the context of PCU, the digital poster approach had certain advantages:

- More suitable content for an on-the-move audience, where content would be displayed in short-duration time slots
- More sustainable supply of content (posters) from different campus units and student organizations without disrupting the normal workflow of these organizations, since most hard-copy posters already had their digital versions
- A greener alternative to the traditional print-based media for posters, especially since the university had announced its commitment as a green campus in 2010
- Possible integration with the acquisition workflow of Petra iPoster, which was one of the digital thematic collections in the university's institutional repository



Figure 6.3. DIVo 3.0 unit equipped with touch-screen technology as a campus directory, located at the campus's main entrance. *Photographer: Petrus J. Prano, used with permission*

During the preparation phase, the library maintained intensive communications with various stakeholders on campus, both through formal channels such as meetings and presentations, as well as informal or personal communication channels, especially with faculty members.

Near the completion of the planning phase, a DIVo team was formed to help with the launching of DIVo 3.0, the management of the subsequent utilizations, and further development of DIVo 3.0. Members of the team consisted of representatives from the library, Public Relations Office, lecturers (from the departments of Visual Communication Design, Communication Science, and Industrial Engineering), and technical staff (including the staff who would maintain the DS system in terms of uploading and scheduling content for DIVo 3.0). The technical staff consisted of a special-project staff member from the Computing Center, assigned part-time, to assist the library in the preparation and inaugural phase of the project. This staff member was assisted by a couple of part-time library staff who would share in the administrative duties of maintaining the DS network. Faculty members were also involved in the hope that they could bring their disciplinary perspectives to content creation, and to motivate them as well as their students to “exploit” the existence of DIVo 3.0 as a research topic. It was thought that this arrangement would help to create a sense of buy-in for DIVo 3.0 on the part of faculty and students, as well as provide valuable input for future improvement and development of DIVo 3.0. During the planning phase of DIVo 3.0,



Figure 6.4. DIVo 3.0 mobile unit, featuring a moveable frame that enables the unit to be located where needed. *Photographer: Petrus J. Pranowo, used with permission*

an undergraduate student was doing research for her thesis project on the ergonomic factors of electronic displays, and how those factors could be implemented in DIVo 3.0 in order to create an effective information and communication medium. The student decided to use DIVo 3.0 as her case study, but since DIVo 3.0 was still in the planning phase, her research could not make use of DIVo 3.0 screens for her field experiments. Instead she used her own screen that incorporated, as much as possible, the planned characteristics of the DIVo 3.0 mobile unit screens. Regarding the content to be displayed, she used digitized versions of 108 old posters that she obtained from the Petra iPoster digital collection in the university's institutional repository. Her research was very useful in providing input for the planning phase of the DIVo 3.0 project. She tested some of the ergonomic factors that influenced the effectiveness of DIVo screens in displaying content, and came up with some recommendations for optimal display of content on DIVo 3.0 screens (Fonda 2013, 51):

- Screens should be divided into only one primary zone and one secondary zone (excluding the static images used as a background template).
- The primary zone could be used to display any type of content (text, image, video, animation, etc.) but the secondary zone should only display running ticker text.

- The content in the primary zone should be displayed between ten and fifteen seconds before changing to another content.
- The running ticker text should use white text on a black background, and run at a speed of sixty words per minute.

These recommendations were all accommodated in DIVO 3.0 screens, except for the campus directory screens for which the recommendations were not relevant.

DIVO 3.0 was launched at PCU as part of its umbrella theme of being a “Green Campus.” The launch garnered a lot of media attention because DIVO 3.0 was the first initiative in an Indonesian university to use a DS network as an information and communication platform. The concept of digital posters as a green alternative to traditional print-based media was also something new to the Indonesian audience at the time. Although the emphasis at the launch was on digital posters, different applications of DS technology were also featured to demonstrate the capabilities of DS networks as a new medium, with the capacity to blend several different types of content from a variety of sources.

Information could be fed live from internal servers maintained by different campus units or departments; examples include a class schedule from the Bureau of Academic Administration; information on job and career opportunities from the Career Center; new book or audio-visual arrivals from the library; just checked-in/out library collections; and visual-based digital content from the institutional repository. External information from a number of different websites that supplied or syndicated their content could also be fed live. Designboom (www.designboom.com) is an example of a website that features interior design, art, and architecture images. These types of information are relevance to universities, which offer courses in visual communication design, interior design, and architecture. External live-feed information also took the form of news, weather information, sport statistics, science trivia, historical or almanac-like information, and photography.

Other uses of digital posters on DIVO 3.0 have included:

- Event-based posters of campus and student activities
- Issue-based campaign posters (green campus, smoke-free campus, no drugs, no vandalism, etc.)
- Inspirational quotes presented in visually rich posters produced by students from the Department of Visual Communication Design as part of their courses
- Welcome posters for university guests and visitors (for conferences, seminars, etc.)



Figure 6.5. Different types of content that can be displayed on Divo 3.0 screens. **Left:** campus directory (upper) and class schedule with live-feed data from the Bureau of Academic Administration (lower). **Middle:** information on job and career opportunities with live-feed data from the Career Center (upper) and interior and architecture images with live-feed data from an external website (lower). **Right:** running ticker text (upper) and a digital poster (lower). *Photographer: Hana Pertiwi Tisdani, GENTA Student Magazine, used with permission by publisher*

- Posters congratulating graduating students and their parents on graduation day with student names and photos displayed individually with the date, taken from the Bureau of Academic Administration
- Posters celebrating campus members' achievements

The PCU Library has developed a number of thematic digital collections in its institutional repository. One of them is the “Petra iPoster,” which contains most of the promotional materials for campus events. The library has collaborated strategically with the Public Relations Office, which must approve all marketing or promotional materials displayed or distributed on campus premises, in an effort to gather as many posters as possible (Liauw 2011, 170). Technical aspects in the field, however, have made the collection

of these materials difficult, resulting in many missed posters. To alleviate this situation, the library had to “chase down” the “missing” posters from various campus units and student organizations. However, this “emergency” solution is far from ideal, and many posters still went unnoticed. The introduction of DIVO 3.0, with its digital-poster concept, has practically eliminated this problem. Now these materials “flow” into the library’s system through DIVO 3.0. All campus units, departments, and student organizations are now lining up to have their promotional materials displayed on DIVO 3.0 screens, which means that they must provide the digital version of their materials. On average, approximately forty to fifty posters are submitted to DIVO 3.0 each month. This has resulted in an interesting phenomenon: members of the campus community would say that “this event [or issue] has been DIVO-ed” to indicate that the promotional material(s) relating to the event or issue were submitted to and featured on DIVO 3.0 screens. Thus, besides performing as—from the library’s perspective—a digital-content acquisition channel, DIVO 3.0 has also become a new popular jargon on campus.

As of 2014, DIVO 3.0 seemed to be performing much better quantitatively—with its thirty-nine screens installed across the campus premises compared to the pilot phase that offered only two screens—as well as qualitatively in terms of its performance as a medium for information and communication. This was suggested by a study on DIVO 3.0 conducted by a group of undergraduate students as a final project for their Industrial Statistics course. The students distributed questionnaires and conducted face-to-face interviews with one hundred undergraduate students in P Building, which houses three faculties (Faculty of Planning and Civil Engineering, Faculty of Industrial Engineering, and Faculty of Art and Design) consisting of ten different academic departments (e.g., Architecture Department, Mechanical Engineering Department, and Visual Communication Design Department). The study produced several interesting findings (Hartawan et al. 2014):

- A majority or almost all students surveyed often saw or watched the information presented on DIVO 3.0 screens, with departmental (78.37 percent) and student organization events (66.12 percent) as the most frequently viewed information (21).
- Only 9.33 percent of respondents said they have never seen or watched DIVO 3.0 screens, while 33.67 percent said they have seen or watched a screen twice daily, and 21.67 percent said three times daily (38).
- Screen-based technology such as DIVO 3.0 was the preferred mode of information dissemination as it was considered to be more economically efficient, had better/wider coverage, and was a more effective way to communicate due to its more visually attractive nature (23 and 24).

- The preferred location for screen placement was beside or near elevators, where 64.67 percent of respondents reported having seen or watched the information from DIVo 3.0 (26).

In general, the study concluded that the DIVo 3.0 screens installed in P Building have helped students get the information they need, and that the information presented was relevant (45).

Student organizations, with limited budgets for printing posters to advertise their events and which experience difficulties in finding effective physical spaces for posting, have benefited, and have the same promotional power and coverage as university departments and units (Hartawan et al. 2014, 24, 49). The study also reported that DIVo 3.0 screens located near or beside elevators have reduced viewers' perceived waiting time for the elevators (26). Based on the survey, the study also recommended some improvements to DIVo 3.0, such as (46):

- Providing more reading time for each poster, which was proposed by 29 percent of respondents;
- Utilizing touch screens for DIVo 3.0 screens, proposed by 26 percent of respondents;
- Reducing the brightness of DIVo 3.0 screens, proposed by 9 percent of respondents;
- Installing more DIVo 3.0 screens to expand coverage on campus, proposed by 8 percent of respondents.

The study also included recommendations for creating content related to individual academic departments and content that uses moving images (49).

Academic departments often post announcements for students containing information that is usually text-based and with a high level of detail. This information is not suitable for a digital poster because content on a DS screen generally will be displayed for only a short time before being replaced by the next poster. However, since the need for more specific departmental-type information has been expressed, more textual (instead of digital poster) DIVo 3.0 screens are being considered for future installation at the administrative counter of each academic department. Such screens could then be populated with the more text-based announcements from each respective academic department, and the transition time could be lengthened to accommodate viewers who obviously need a much longer time to read the information. It was also proposed that these screens accommodate touch-screen technology in order to allow students to select the announcement(s) they want to read. The data and recommendations from this study can be accommodated in the future development of DIVo 3.0.

A couple of small-scale user satisfaction surveys were conducted by the DIVo team in February 2017 to obtain some metrics related to DIVo 3.0's performance; one survey targeted students, and another targeted faculty and staff. Table 6.2 shows some of the survey results. The surveys indicated that a very small percentage of respondents never paid close attention to the information displayed on DIVo in the past month (15.2 percent for students, and 3.3 percent for faculty/staff). The majority of respondents (59.8 percent for students and 60.1 percent for faculty/staff) indicated that they have seen two to three information posters on DIVo at one time, with a time of thirty to forty-five seconds per viewing. A high proportion of respondents indicated that the information posters they viewed on DIVo were very clear or clear (77.1 percent for students and 83.4 percent for faculty/staff). However, respondents were split in their opinions about the duration for each information poster on the screen, with 43.5 percent of students and 40 percent of faculty/staff requesting that the display duration be slowed down (increased time duration). This is good feedback for DIVo team to consider—adding a little bit more time to the current default display time for each piece of displayed information. The majority of respondents also reported that they could adequately understand the content of each information poster with one or two viewings.

Another recent development has also been very encouraging. On November 22, 2017, the vice rector for General Administration and Finance issued an official memo explaining some new policies in effect for the 2017–2018 fiscal year (Toly 2017), including a new policy on internal (on-campus) advertisements. The university made it mandatory that all advertising of campus events and programs be posted on DIVo and to *Dwi Pekan*, the official online campus newsletter, beginning in the 2017–2018 fiscal year. The university will no longer approve any budget for printed advertisement materials, although there are exceptions for campus events and programs that need to be advertised outside the campus boundaries. All these developments have been very encouraging, and have added to the excitement of more positive developments for the future.

Lessons Learned from the DIVo 3.0 Project

Experience gained in planning, executing, and managing the pilot phase and the DIVo 3.0 project have provided some lessons, which can be applied to similar projects. These lessons include:

- Thinking and planning strategically for arrangements that will create a sense of ownership for the outreach initiative among campus community members. By making DIVo a common platform, as many members of the

Table 6.2. Some Results from the DIVO 3.0 User Satisfaction Survey conducted in February 2017 (DIVo team 2017)

Survey Question and Response Options	Students (n=92) %	Faculty/Staff (n=30) %
How often do you pay close attention to the information displayed on DIVo in the past month?		
Never	15.2	3.3
1–2 time(s)	30.4	30.0
3–4 times	18.5	6.7
5–6 times	9.8	20.0
7–8 times	8.7	6.7
>8 times	17.4	33.3
How many displays of information do you usually see on DIVo at one time?		
1	12.0	10.0
2	31.5	43.4
3	28.3	16.7
4	9.8	13.3
5	4.3	0
>5	14.4	16.7
How clear is the displayed information that you see on DIVo?		
Very clear	5.4	26.7
Clear	71.7	56.7
Somewhat clear	19.6	16.7
Not clear	3.3	0
What do you think about the duration of each display of information on DIVo?		
Appropriate timing	45.7	56.7
Needs to be slowed down	43.5	40.0
Needs to be sped up	10.9	3.3
How many times of presentation do you need to really understand a display of information?		
1	14.1	30.0
2	59.8	43.3
3	19.6	13.3
>3	6.5	13.3

community as possible can contribute and participate in the various roles and capacity in various stages of the initiative.

- Linking the outreach initiative—such as Divo 3.0—to the academic nature of the university by making it an interdisciplinary topic for researchers and students, as well as a medium for encouraging creativity and experimentation, is important.
- Taking an informal and personal approach—in conjunction with formal processes—in advocating an outreach initiative is essential.
- Integrating the new DS networks with or into existing systems and information assets on campus is crucial because it is essential to provide rich and varied content, and gives more legitimacy to the initiative as it augments and combines various assets into a more appealing product or service for the campus community.
- Using a substructure project such as DS network can serve well as an outreach initiative that facilitates information dissemination and improves communication among the campus community, as well as stimulate a visually rich atmosphere on campus, for an academic library outreach initiative does not have to be limited to an event- or activity-based program.

FUTURE DEVELOPMENTS OF DIVO 3.0

Based on the lessons learned and recommendations from various studies described above, some improvements and innovations have been discussed, although not yet implemented. One is providing interactivity to Divo 3.0. Each of the currently installed mobile units has provided physical space to accommodate additional hardware such as RFID readers and webcams. In terms of interactivity, an idea has been entertained among members of the Divo team to supply a QR (Quick Response) code for each digital poster displayed on Divo 3.0. The QR code represents the URL (Uniform Resource Locator) or Internet link to the respective digital poster in the “Petra iPoster” collection in the University’s institutional repository. Viewers will then be able to scan the code from Divo 3.0 screens using their smartphones or tablets and be directed to the proper URL to pull the same poster (or a lower resolution version) archived in the repository. A web application could also be developed and then integrated into the campus directory screens, which would enable viewers to browse and select the desired digital poster(s) among the many posters archived in the repository, thus transforming the campus directory into a campus information kiosk. These improvements would provide some level of interactivity without the need to add any new hardware to the currently installed Divo 3.0 screens. Although these improvements have not been implemented, it was encouraging to see that simi-

lar features had been requested by students through the study conducted by Hartawan et al. (2014, 49).

Many students also seem to find the use of moving images (video and animation) to be highly desirable. Producing animated posters might be a bit challenging for campus units or student organizations, however, for several reasons:

- Animated poster production deviates from the usual workflow of print-based poster production.
- More specific skills are needed to design and produce animated posters, and people with these skills usually are scarce both within and outside the organization (in the case of outsourced design and production).
- Compatibility issues might arise in the playback of videos and especially animations in terms of the available codex or computing resources in the DS players on campus.

On the other hand, these challenges can open up opportunities for collaboration with academic departments that are visual- or design-based, such as—in the case of PCU—the departments of Visual Communication Design, Interior Design, Architecture, and Communication Science. These departments can potentially offer a certain level of assistance in the production of animated posters and content by integrating this task into the courses they offer. Such arrangements would benefit every party. Students would be motivated to produce the best animated poster design because they know that the best designs will be featured on DIVo 3.0 screens. The departments could also exploit the DIVo 3.0 as a new medium for their faculty members and students to experiment with when creating new digital arts or content.

In terms of using DIVo 3.0 for research topics, various aspects of DIVo 3.0 could continue to be proposed as research projects, either by the faculty members or by students. There has been initial interest in a collaborative research project between the departments of Communication Science and Informatics Engineering to create an automated audience measurement of DIVo, using technology such as Microsoft's Kinect. Another expressed interest is a collaboration between the departments of Electrical Engineering and Informatics Engineering to create a futuristic robot that carries with it a DIVo 3.0 screen, with the capability of detecting crowds in order to approach and present them with the screen. Other interesting research topics include viewers' behaviors related to different types of content at different locations for DIVo 3.0 screens, and at different times of the day. A research project to measure the effectiveness of visual elements for different types of content would also be useful. Research on programming would be another interesting prospect, as the DS network has literally evolved into a communication medium that is comparable to a television station, only with different types of

content and audience. Finally, another proposal has been to launch a competition for students to come up with ideas or projects to develop content and interactivity for DIVO 3.0.

In the long term, DIVO also has the potential to be used for other outreach initiatives beyond the campus boundaries. The fact that the DS network runs on an Internet network makes it highly flexible and capable of reaching a much wider audience than the traditional print medium. In the case of PCU, collaborations could be proposed to provide DIVO 3.0 as an educational medium in PCU's partner schools, wherein the educational content could be developed jointly between the partner school teachers and the students or faculty from various academic departments at PCU. This arrangement would be mutually beneficial, since PCU has been proposing to open a new school/department majoring in education.

In conclusion, it is apparent from discussions thus far that our imagination and creativity are the only limits placed on the possibilities and opportunities that can be achieved with a DS network in higher education and/or academic libraries. The continuing advancements of technologies only amplifies what can be achieved. However, as Michelle Dunner (2016, 20) has eloquently noted, "There's a danger . . . [in] focusing on the means rather than the message." In that regard, although the capacity to integrate and utilize technologies is crucial, the message (content and context) is still the top priority of any DS project. Once the message is there, an organization only needs to find its DS champion, who "thinks strategically . . . and looks at the system as an opportunity" as well as holding a management perspective, because once a DS network is installed, "it's no longer really a facility issue—it's a communication issue" (Matthews 2016, para. 2).

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Part III

**Community Outreach: The Academic
Library in the Community**

Chapter Seven

Academic Libraries and STEM Outreach Programs

Connecting the Library and the Community

Naomi Bishop

Increasing the engagement of underrepresented minorities and females in the fields of science, technology, engineering, and math (STEM) is currently a critical issue in the United States. Recent analysis finds that young women and young people from lower socioeconomic and diverse backgrounds are less likely to pursue studies in STEM fields. A deep engagement in STEM requires much more than memorizing isolated facts or information. Pursuing STEM interests also requires scientific literacies that are embedded in reading, writing, and creating—essential elements of every K–12 curriculum. A vital question to answer is how to engage underrepresented young people in STEM and help them persist in these fields as they progress through their educational and professional trajectories.

Informal learning environments can be particularly good for engaging youth from minority communities in science learning (Bell and Bang 2014–2016). Library outreach to communities through STEM programming can connect students with information resources and opportunities for learning outside the classroom. Academic librarians have an important opportunity to impact students before they even enter college through early-outreach STEM programs (Sellar and Scaramozzino 2009). When K–12 groups visit, the library encourages young students to explore and learn about research, and becomes a place of learning, collaboration, and exploration for the local community. A library’s mission and values may often only focus on students and faculty, but college libraries that embrace the local community can share a wealth of information resources with the next generation of students.

The value of teaching library research skills to young students also extends to helping families and local communities gain greater access to research and libraries. As described in this chapter, partnerships between local community schools and the science engineering librarian created opportunities for underrepresented students to visit the campus library and learn about research. By introducing students to the importance of research, particularly scientific research, a librarian can empower a new generation of leaders. This chapter will provide a case study of STEM outreach programs provided at two university libraries and will illustrate the positive outcomes from school-community-university partnerships.

LITERATURE REVIEW

The academic literature within the fields of library and information science and education is increasingly focused on outreach and community. Research on community involvement and academic libraries highlights the need for partnerships among science and engineering librarians and local communities. Many partnerships and programs between academic librarians and outside community groups have focused on early literacy, teacher workshops, bibliographic instruction, and summer transition programs (Burhanna 2008; Carlito 2010; Cosgrove 2001; Smeraldi, 2013). However, more recently the literature has focused on library outreach to science and engineering programs among K–12 populations. Some example programs described in the literature include a STEM program for middle school students at the University of Nevada, Las Vegas Libraries (Godbey et al. 2015), a summer health-care program at the University of South Alabama for high school students (Rossini, Burnham, and Wright 2013), and a partnership between the Ohio State University Library and a STEM high school in Ohio (Herring 2013). STEM programs and partnerships are not limited to academic libraries; many public libraries have also added STEM outreach programming. These programs often focus on fun recreational activities and one-day science programs (Roberson 2015). The interest in STEM programming in public libraries and academic libraries is growing, but creating an information literacy program that is both informative and engaging is challenging (Fontno and Brown 2015). Inviting students into an academic library can provide both useful and entertaining lessons for young students, exposing them to more research than is available in school or public libraries, and can also help young students build relationships with university faculty and librarians. Teaching science literacy and information literacy to younger students gives these students more exposure and opportunities to engage in science education over the entire course of their academic careers (O’Toole 2017). The National Research Council (2012, 1) notes that

the overarching goal of the framework for K–12 science education is to ensure that by the end of 12th grade, all students have some appreciation of the beauty and wonder of science; possess sufficient knowledge of science and engineering to engage in public discussions on related issues; are careful consumers of scientific and technological information related to their everyday lives; are able to continue to learn about science outside school; and have the skills to enter careers of their choice, including (but not limited to) careers in science, engineering, and technology.

Librarians within academic institutions can provide innovative information literacy and instruction programs for K–12 students by connecting communities and university libraries in the discovery of science and engineering. Discussing the importance of academic library programming, Dana Knott and Kristine Szabo (2013, 348) noted that “many of the students had never visited a college campus before or even thought about attending one.” University libraries are filled with various research materials, including books, journals, electronic databases, and more that can be used to introduce ideas about academic libraries and engage students of different ages in learning about science (Subramaniam et al. 2012, 163). For example, introducing the concepts of patents and intellectual property to college students is often part of a science and engineering librarian’s job (Meier 2012). Similar outreach to K–12 students allows for discussions of intellectual property and patents, and can help younger students understand how engineering and science applies to everyday living.

African American, American Indian/Alaska Native, and Latino populations are growing in size and influence. Currently, they constitute 30 percent of the U.S. population, but by 2050, these groups will account for more than 40 percent of the U.S. population. These minority populations are particularly underrepresented in the fields of science, technology, engineering, and mathematics. Higher education experts say this gap poses an alarming problem not only to universities, but also to the nation as a whole. A special report from the National Science Foundation (2017) highlights a slight increase in science and engineering degrees for Black, Hispanic, and American Indian or Alaskan Native peoples, but they remain underrepresented in the science and engineering workforce. This report illustrates the need for continued STEM outreach to underrepresented students. Through engagement with underrepresented students in the community, academic librarians can help increase interest in STEM majors and careers.

OUTREACH TO THE COMMUNITY

Many university campuses have several community education initiatives to bring underrepresented students to campus. Outreach and recruitment of

underrepresented students for STEM fields should start at a young age. University programs that seek to increase the college access pipeline for underrepresented students in the sciences often begin by creating opportunities for young students in the community to learn about the sciences and engineering. Academic libraries can play an important role in recruitment by participating in local STEM outreach initiatives. The activities described in this chapter were a part of university outreach initiatives at the University of Denver and Northern Arizona University.

UNIVERSITY OF DENVER PROGRAMMING

The University of Denver (DU) is a co-educational, four-year university in Denver, Colorado. Founded in 1864, it is the oldest independent private university in the Rocky Mountain region of the United States. DU enrolls approximately 5,700 undergraduate students and 5,800 graduate students; 20 percent of students identify as students of color. In 2006, DU was introduced to the concept of Inclusive Excellence when Dr. Alma Clayton Pedersen, vice president for education and institutional renewal within the Association of American Colleges & Universities (AAC&U), delivered a keynote address at the annual DU Diversity Summit. Several months later, DU chancellor Robert Coombe and provost Gregg Kvistad asked the university's senior leadership to embrace Inclusive Excellence and begin working in conjunction with the Center for Multicultural Excellence to implement it at DU as a framework for its commitment to diversity (University of Denver 2016).

DU Day of Action

The DU Day of Action is a campus and community partnership that provides a daylong college experience for elementary school students and their families. The program provides an opportunity to explore the DU campus, learn more about college, and participate in hands-on demonstrations for both the students and their parents. The K–6 program, created by the science librarian, introduced elementary school students to a university library and the different types of information sources, and also included an active learning activity to learn the parts of a book. Students ranged from five to twelve years of age and were accompanied by their parents. This gave the librarian the chance to teach both students and parents about libraries, research, and the importance of science literacy.

The goal of the DU Day of Action workshop was to host a library experience that would spark excitement in elementary students for college, and perhaps even an interest in STEM fields. The librarian hosted two sessions, each with about fifteen students and fifteen parents from underrepresented populations. Workshops were designed to be fun and hands-on to encourage

the children to participate, and to expose them to some aspects of college. The learning outcomes for the day included introducing students to research, connecting student interests with books from the collection, and helping students understand how to create a citation.

Activity 1: Parts of a Book and Creating a Citation, Ages 5–10 (Grades K–4)

A significant part of the Day of Action involved an activity designed to engage students with print materials. The goal of the activity was to introduce students to a university library, the different materials found in the library, and the parts of a book. This activity required minimal technology, but a good number of books and library materials. For the presentation, the librarian created a PowerPoint with slides introducing students to college libraries with photos, examples of different types of materials (e.g., maps, science journals, magazines, encyclopedias, dictionaries, DVDs, and CDs), and a slide with examples of the parts of a book (e.g., title, author, illustrator, editor, date, publisher, place of publication, and call number). For the activity, the librarian selected thirty to forty books from the stacks on science and engineering topics, as well as diverse children's and young adult books. The librarian also provided pencils and paper for students to write on.

In order to introduce students to the university library, the librarian first started by asking them a variety of questions: Have you ever visited a library before? What do you do in the library? Do you know how to find books in the library? What is research? What would you like to research? What is engineering? After the students responded to the questions in a group discussion, they were invited to select a book for themselves and asked to look at the different parts of the book, including the cover, title page, and spine. Students were instructed to make observations, like scientists do, to find the different parts of the book. The librarian then passed out paper and pencils and instructed students to write down the different parts of the book. This activity took about twenty minutes for students to complete and was followed by a short presentation showing the academic library website and catalog.

The University Libraries participation in the Day of Action allowed elementary students and their parents to learn more about academic libraries, to experience exploring STEM books from the collection, and to discuss topics they would like to research in the future. Talking with young students about the library, books, research, and engineering opens their eyes to the possibilities for college. After the session, students shared with their parents and event organizers that they enjoyed the book activity and wanted to spend more time at the library in the future. Some parents also asked if students could visit the library after the session and tour the college library on their own with their friends.

Denver Public Schools Summer Academy for English Language Acquisition

In June 2015, the science and engineering librarian also participated in a Denver Public Schools English Language Acquisition (ELA) Department Summer Academy, which brought forty-five ELA middle school students to campus to learn about college and prepare for high school. The workshops for these students were intended to highlight different aspects of college, from the types of curricular options available to student groups and activities. Students toured the library and attended a session on copyright, patents, and citations. Students were challenged to think about the following questions: What is research? What is copyright? What is a patent? At the end of the tour and discussion, students and teachers also learned how to create a citation from a book.

Activity 2: Learning about Research, Copyright, Patents, and Citations, Ages 11–16 (Grades 5–10)

As part of the English Language Acquisition summer program, the librarian designed a forty-five- to sixty-minute activity that gave middle school and high school students an introduction to library research. Teaching students about copyright, research, patents, and citations was the goal of this activity. The technology used included a PowerPoint presentation introducing students to college libraries through photos and examples of different types of research materials, as well as slides with discussion questions and an example of the parts of a book (e.g., title, author, date, publisher, place published). The materials needed for this activity were thirty to forty books on science and engineering topics (e.g., animals, space, technology, climate, environment, human body, food, video games, robotics, aerospace, computer science), diverse young adult fiction, a book cart, a map, a science journal, a popular magazine, an encyclopedia, a dictionary, and a DVD. Additionally, the students were provided with small notebooks, paper, and pens or pencils to write out citations.

The first part of the activity involved asking students questions. The librarian started by asking the students to share what they thought about the following question: “What is research?” Students responded with different answers including discoveries, inventions, new ideas, and asking tough questions. The next question was, “What would you like to research?” Next, the librarian asked every student to think and share one thing they would like to research. Some of the topics proposed were soccer, dinosaurs, cancer, Mars, love, science, food, music, art, the brain, energy, and computers.

The librarian pointed out to students that for any topic they wanted to research they could look it up in the library catalog to find books and articles on those topics. Following the discussion of research was a discussion about

copyright. The librarian asked students, “What is copyright?” This question made students think a little before they answered. One student responded, “It’s that thing at the beginning of the movie!” The librarian pointed out that copyright applies to all original works created and that every individual has the copyright to things they create. The FBI copyright warning before a movie is an excellent example for students to understand the concept of copyright. The final question she asked students was, “What is a patent?” Students took a few minutes to think before responding. One response was, “It’s my headphones. It’s my iPhone. It’s so no one can copy your idea.” The opportunity to introduce students to patents allows them to think about inventions in science and engineering, and how everyday technology once started as an idea and then became a research project or a product.

After introducing students to the concepts of research, copyright, and patents, the librarian allowed students to pick a book off the cart to explore. Students had a few minutes to read, examine, and investigate the books. The librarian then showed students the different parts of a book and explained to them what information is needed to create a citation. Students were shown that there are different citation styles, but that all the basic information needed to create a citation is the same. She gave students about ten minutes to write down the information needed for a citation from the book they selected. Students copied the citation format from the example on the PowerPoint slide.

Karri Wingert and Tim Podkul (2014–2016) highlight in a University of Washington STEM Tools Practice Brief that “multilingual students have important insights to contribute to learning, and scientific communities greatly benefit from the diversity of thought and experience these students bring.” Asking questions and listening to the range of answers in the session allowed for a lively discussion and a shared learning opportunity for students. After the workshop, teachers and students told program organizers that they appreciated the opportunity to learn more about copyright, patents, and citations because they had not been exposed to those topics in school. Students attending the summer academy at DU were very receptive and engaged with the content of the workshop.

The importance of librarians participating in campus partnerships with the greater community is integral to the future college success of underrepresented students. Academic libraries can be overwhelming for students, but giving them a personal introduction to research in the library and engaging them with activities about copyright, patents, and citations can help ease some of their fears. The science and engineering librarian made it her mission to help students feel welcome and comfortable in an unfamiliar setting. In an interview describing the program, Pablo Joucovsky, dean of academics at South High School, noted how the ELA students take every available opportunity to learn. Christine Muldoon, director of English language development pro-

grams for the Denver Public Schools, also noted in the same interview that the summer academy is “about getting them used to that college campus.” Further, Adrienne Martinez, assistant director for student access and success programs at DU, stated in a *Denver Post* article highlighting the summer academy that “the more familiar they are with a college campus, the more likely they are to go to college” (Robles 2015). Finally, Knott and Szabo (2013, 348), describing a similar program, observed that middle school students visiting the University of Delaware gained a new perspective on college: “once students visited campus, college was now on their radar.” These middle school students transitioning to high school in Denver now have a connection to a college library and can think about the possibilities for their role in future scientific research and higher education.

American Indian College Fund

A third collaborative program for the science and engineering librarian was the American Indian College Fund summer undergraduate research internship. In this program, two tribal college research interns conducted projects on enhancing student success at tribal colleges and universities. The interns had the opportunity to practice research skills and gain real work experience at a professional nonprofit organization in Denver. The University of Denver Center for Multicultural Excellence housed the students on campus for the eight-week summer program. As part of the program, students gained access to library materials and databases and had one-on-one research consultations with the science and engineering librarian. Students received training on searching library databases, conducting a literature review, and creating an annotated bibliography. While the research that the students were conducting was not directly related to STEM, the students were paired with the science and engineering librarian due to her shared Native American background, which provided an opportunity for the students to see someone with a similar background to them working in a STEM field.

Activity 3: Introducing Students to the Academic Library, Ages 16–21 (High School and College)

As part of the tribal college students’ research experience, the librarian designed a special activity to help them become acquainted with academic research. The learning objectives and goals for this activity included an understanding of a university library, creating a search strategy, exploring databases, and understanding the basics of literature reviews and primary sources. The technologies needed for this activity were a laptop computer, digital screen (monitor or projector), and access to library electronic databases. The materials students needed were a pen and paper to take notes, a whiteboard with markers, and a computer to practice searching. For this

activity, each student defined search terms for their specific topic, searched in different databases, selected and evaluated articles, and made annotations for each article. Before students began the activities, the librarian gave an overview of the library homepage, introduced a few subject databases, and provided some discussion questions.

The first question to discuss with students was “What is your research question?” Students wrote down the main topics for their research questions on a whiteboard. The librarian then asked the students to brainstorm and list search terms on the whiteboard, then asked students, “What search terms will work best for your topic?” and “Where should you start searching?” She gave students ten minutes to search the library databases and discover results. She also instructed students to document search terms and results. Students shared what they found in the databases with each other. Finally, the librarian asked them to read through the articles and evaluate the results based on whether these articles were helpful, informative, current, relevant, accurate, and authoritative. The students shared with each other the information found on their topics and discussed whether the resources shared a common connection and helped answer the original research question. This activity took forty-five minutes to complete. When a student didn’t find much relevant information, the librarian discussed the reasons why there was little published literature on a particular topic. She directed them to other sources and gray literature, and other primary sources such as interviews, personal stories and experiences, news, blogs, or government data. The consultation meeting with students initially ran forty-five minutes, but the librarian also was available for follow-up meetings to discuss search results and evaluate articles individually with each student.

What is the significance of providing library services committed to Native American students? According to an article by Cecilia Barber (2009, 36), “every student has a unique background and recognizing that goes a long way in helping the student feel valued.” Librarians are in a unique position to encourage students to pursue their research goals because, unlike other academic professionals, librarians can help individuals discover information through electronic databases, journals, and books. Many Native American students are first-generation college attendees, and 91 percent of American Indian College Fund scholarship recipients are “nontraditional” students (Schmidt and Akande 2011). Equity, access, and community are values that the library profession embraces, and librarians can support first-generation students. Librarians can work to empower individuals from all backgrounds to embrace lifelong learning, research, and scholarship.

Of the thirty-seven tribal colleges in the United States, only nine offer four-year bachelor’s degree programs. Most tribal colleges only offer two-year associate degrees, but all offer opportunities to transfer to four-year colleges or participate in distance learning programs (Schmidt and Akande

2011). Having a science and engineering librarian assist tribal college student interns gave the students the opportunity to have a Native American role model and mentor in higher education. According to David Alexander (2013, 66), “A legacy of schools prohibiting cultural practices, including the speaking of Native languages, of removing American Indian children from their homes to boarding schools, of abuse in boarding schools, and so on may impact some American Indian students’ experience with education,” and librarians working with American Indian students can and should help make the library more approachable for students seeking research assistance.

The American Indian College Fund tribal college interns experienced a unique and valuable summer research program at the University of Denver Libraries, with assistance from the DU Research Center and a librarian. The students completed literature reviews and presented their research to directors and staff at the American Indian College Fund after completing the eight-week program. Students reflected on the librarian and library resources and commented that meeting with the librarian was a tremendous help and that they gained important research skills by using the DU Libraries. The two interns shared their frustrations with searching databases to try to find relevant information, and discovered that there are few publications or recent research on the American Indian student experience. This discovery gave the students more motivation to continue their education and to write, share, and contribute to the field of higher education. The DU Libraries plan to continue to support summer research programs from the American Indian College Fund and serve as a support for tribal college students in the future.

NORTHERN ARIZONA UNIVERSITY PROGRAMMING

Northern Arizona University (NAU) is a four-year public university located in Flagstaff, Arizona. NAU offers undergraduate and graduate programs and has a student body of thirty thousand students. NAU began as Arizona State Teaching College in 1899, and in 1966 the college became Northern Arizona University and expanded degree programs. Today NAU is one of three public universities in Arizona. NAU has a strategic goal to become one of the nation’s leading universities serving Native American communities. The geographic proximity of NAU to several tribal communities including the Navajo and the Hopi allow for a unique opportunity for university outreach. More than one hundred tribes are represented at NAU, and a large number of students come from Arizona and New Mexico. The Cline Library at NAU collaborates with the Native American Cultural Center on campus to provide outreach opportunities to youth from Arizona tribal communities. In 2016, Cline Library received a library services technology grant to purchase equipment for a makerspace. The library’s makerspace opened in fall 2016 and

offers 3D printing, electronic prototyping, and 3D design for the university and the community. Students heavily use the new makerspace, and in 2017 the science and engineering librarian began offering workshops for Native American school groups and educators on 3D printing.

3D Printing and Tinkercad

Another opportunity to engage K–12 students in science and engineering topics in the library is through maker labs and 3D printing. These technologies are moving into academic libraries and becoming an integral element for science literacy (Fisher 2012). In 2017, NAU opened a space for students and the community to make and create. The space was funded by an Arizona Library Services and Technology Act (LSTA) grant and promotes learning beyond the classroom. According to Washor and Mojkowski (2013, 208), “Making provides opportunities for young people to use their hands and their heads.” Academic science and engineering librarians have the opportunity to invite local students to the library to learn about 3D printing and to create their own projects. The workshop, provided by the NAU science engineering librarian, focused on teaching students about copyright and intellectual property, as well as how to draw a design and create an object in Tinkercad. This two-hour workshop for middle school students and teachers from the Navajo Nation took place in the library maker lab.

Activity 4: Basics of 3D Printing and Tinkercad, Ages: 10–14 (Middle School)

First, the librarian introduced students to how 3D printing works and gave them a tour of the space. Then students were asked, “What would you 3D print, and why?” The students gave lots of answers, including animals, tools, characters, and sports teams. The students’ ideas led to a discussion on why the library could not print cartoon characters and sports team logos due to copyright laws. Students were then asked, “How can 3D printers be used to improve society and improve lives?” Responses included helping doctors and patients, creating new tools, and designing better products. After a discussion on research and new inventions, students were instructed to draw something they would like to print. Then laptop computers were handed out and students signed up for accounts in Tinkercad. Students then spent the next hour tinkering with and creating objects in Tinkercad. At the end of the hour, students were given the option to send finished designs to the printer, and a few students were able to do so. The feedback from participants was positive, and many students asked if they could return to the library on their own to work on projects. The science and engineering librarian invited all the students back to visit, and the library technology staff offered assistance with helping teachers set up their own printer at the middle school.

CONCLUSION

The goals of these outreach programs for academic libraries include giving students an opportunity to discover more about college research libraries, explore different formats for information, and think about topics related to copyright, patents, and scientific research. Designing the activities helped students connect their own interests to resources and scientific information. Students discovered that the library is not just about books and computers, but is a place for them to create and conduct research. An important role of science education is not just to teach facts, but also to prepare students with sufficient core knowledge so that they can later acquire additional information on their own (National Research Council 2012). Allowing students the opportunity to discuss the topics that they wished to research, and then connecting those topics to information found in the libraries, gave young students a foundation that will help them succeed in school and life. Students visiting university campuses should not only feel welcome to explore the libraries, but should also feel empowered and engaged to search for answers, just like scientists and engineers. The nationwide focus on STEM education provides an impetus for science and engineering librarians to expose students and parents to everyday science. Librarians should take advantage of these opportunities on campus and in the community to connect the next generation to academic library resources and to encourage students to research, invent, and create new knowledge.

Librarians can play an active role in enhancing public understanding of science for younger students and contribute to the pre-college pipeline through outreach activities (Sellar and Scaramozzino 2009). American Indian students in particular are greatly underrepresented in the STEM fields, and need more opportunities to connect with the sciences and engineering. Science and engineering librarians can help American Indian students discover opportunities in science and engineering through personal connections and research opportunities. Teaching students at any age the importance of research and libraries can empower a new generation of leaders, scientists, and engineers. Librarians can expose underrepresented students to research and build a connection to encourage students to continue higher education opportunities. Teaching younger students about research and libraries also allows the student to take home this knowledge to parents, siblings, and family members; thus, valuable information can spread through a community from just one student visiting a university library. The impact of a university library on a student can last a lifetime and provide a valuable resource, not only to the student, but to his or her community.

Opportunities for academic libraries to do STEM outreach with local communities are abundant. Educators and librarians can work together to build partnerships and programs that introduce K–12 students to science and

engineering research. Sharing ideas, resources, and expertise can provide students with amazing learning opportunities. Building successful relationships with communities takes time and commitment, however. After participating in campus partnerships with the community, librarians should follow up with organizers and collect feedback. This feedback may lead to improvements and adjustments in activities and workshops. Some of the feedback from the activities described in this chapter included: providing parents with a list of science and engineering activities and books available at the local public library, because students lack continuing access to an academic library; and giving students a take-home sheet with information about additional STEM programs at their local library, such as Lego, robotics, or kids coding clubs. Partnerships and collaboration among academic libraries, local schools, and public libraries offers underrepresented students the best opportunities for engaging in science and engineering activities, research, and career exploration.

This chapter considered the critical issue of underrepresented student groups participating in STEM. A STEM identity is developed by active participation in the environment, and “supporting classroom science talk is a crucial method of learning and may be especially important for English Learners” (Wingert and Podkul 2014–2016). Academic libraries are ideal places to promote such identities because they are uniquely situated as a hub between the outside world and the classroom, between multiple media forms and technologies, and between personal and formal learning. It is imperative for academic librarians to explore how their participation in early outreach programs for STEM can help young people develop higher levels of interest in science and a sense of their ability to pursue science as a career.

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Chapter Eight

Academic Library Exhibits and Programs

Outreach through Campus and Community Partnerships

Manju Prasad-Rao

For over twenty years, the B. Davis Schwartz Memorial Library at Long Island University's LIU Post campus has used exhibits as a focal point for programming and as a means to connect with the wider community. Collaborating with campus departments, the library has reached out to the local community through partnerships with public libraries, schools, and lifetime learning organizations. This has resulted in benefits to the library and its partners in terms of increased attendance and participation at events, diversity of audiences, and development of social capital and synergy. This collaboration has also strengthened the library's application for grants and national traveling exhibits funded by the American Library Association (ALA) and other organizations. Key components in advocating for a project's merits to prospective partners include the library or institution's mission statement, project goals and objectives, and an emphasis on campus assets and support mechanisms. This case study will discuss community outreach through exhibits, and should encourage other academic libraries of different sizes and types to reach beyond their primary campus audiences and envision themselves as belonging to a wider community.

BACKGROUND

Long Island University is one of the nation's largest private universities. It educates more than twenty thousand students each year across multiple cam-

pus, and offers more than five hundred undergraduate, graduate, and doctoral degree programs and certificates. Long Island University was founded in 1926 in Brooklyn, New York, and later expanded in 1951 when it purchased the estate of Marjorie Merriweather Post in Brookville, Long Island. This 307-acre campus was named C. W. Post College, and in 2012 was renamed LIU Post. It is located twenty-five miles east of New York City on Long Island's idyllic north shore, aptly named the Gold Coast.

LIU Post is very scenic and historic, offering a small suburban school environment within easy driving distance from New York City. Of a total student population of 6,154, 39 percent are minority (13 percent African American, 13 percent Hispanic, and 13 percent Asian and Pacific Islander). There are 282 full-time faculty members and an equivalent number of adjunct faculty. The university offers many distinct academic, professional, artistic, and co-curricular opportunities, and the area surrounding the campus is populated by culturally aware individuals from varied ethnic backgrounds. The university also offers continuing education courses and enrichment programs, such as the Hutton House Lectures (LIU Post 2016a), to the local community on an ongoing basis. The campus is the site of the Tilles Center of the Performing Arts and the Steinberg Museum of Art as well. The Tilles Center has become very well known for presenting internationally known orchestras and performers, and both the Tilles and the museum have arts in education programs that connect with school students and families. The B. Davis Schwartz Memorial Library, the academic library for LIU Post (LIU Post 2016b), is the intellectual and social hub of the campus. It has two exhibit spaces: one is in the main lobby of the library, and the other is the Hutchins Gallery, an expansive and elegant marble space with chandeliers and track lighting, all very appropriate for original and special art exhibitions and programs. In 1990, to take advantage of its position as the center of campus life, the library established the "Library Link Program," and presented displays and lecture series such as *Asian Perspectives* and *American Voices: American Roots*. In 1993, the library began a very successful campus-wide initiative, *Nonviolence: The Global Choice!* Since then, the library has formed partnerships with many campus and community organizations, and hosted several national traveling exhibits.

This chapter will use LIU Post's B. Davis Schwartz Memorial Library as a case study to illustrate how exhibits in academic libraries can reach audiences beyond the campus, using the new or existing community networks of its varied campus services. The goal is for academic libraries to take purposeful and incremental steps toward a vision of belonging to a wider community. As examples, I will focus on two types of multifaceted large-scale projects. The first project described is *Nonviolence: The Global Choice!*—a successful exhibit with original student artwork as well as lectures and discussions by faculty and guests—which was displayed both physically and online and was

later converted to a traveling exhibit and sent to many local libraries. The second type of project includes ALA-sponsored national traveling exhibits such as *A Fine Romance: Jewish Songwriters, American Songs, 1910–1965*; *Lincoln: The Constitution and the Civil War*; and *NEH Bridging Cultures Bookshelf: Muslim Journeys*, for which the library was selected as a host site. These exhibits featured extensive programming, including lectures, performances, book discussions, other exhibits, and more.

NONVIOLENCE: THE GLOBAL CHOICE!—EXHIBIT AND PROGRAMS, 1993, 1999, 2000

Goals and Objectives

A project with a vision, defined purpose, and broad framework is very useful for planning, promoting, and collaborating with campus and external partners. At LIU Post, the goals of the Library Exhibits Committee run parallel to the mission of the university, and one of its objectives is to contribute to the awareness of multicultural diversity at LIU and in the Metropolitan New York community where our faculty and students reside. Programs are designed to promote acceptance and understanding among ethnic and racial cultures. Hence, the library places importance on cultural and community programs, specifically those that promote civic understanding. Lappe and DuBois (1994, 239) highlight the “Ten Arts of Democracy”: active listening, creative conflict, mediation, negotiation, political imagination, public dialogue, public judgement, celebration and appreciation, evaluation and reflection, and mentoring. The exhibit *Nonviolence: The Global Choice!* (BDSML 2000) proved successful in incorporating several of these elements, and also helped to bring the university much closer to the local community as well as area public libraries. The drafting of goals and objectives was crucial to its success, and provided direction to the programming.

The broad goals of the *Nonviolence* program were:

1. Presenting informative and educational displays that show the comprehensive aspects of nonviolence.
2. Reaching as many people as possible with the message that nonviolence is an effective technique of conflict resolution.

The objectives of the *Nonviolence* program were:

1. Encouraging students to participate in displays and reflect on issues of social significance while raising their awareness about nonviolent ways of settling differences, whether these are racial, religious, ethnic, or socioeconomic.

2. Creating an awareness of environmental concerns and make the audience mindful of the role they play in preserving Planet Earth and its creatures.
3. Creating a greater appreciation of multicultural differences.
4. Familiarizing audiences with the teachings of Martin Luther King Jr., Mahatma Gandhi, and others who have helped their people to achieve freedom and/or further their civil rights through nonviolence.
5. Creating links with the local community.
6. Enhancing the visibility of Long Island University and the library as institutions concerned with the betterment of society.

Based on these objectives, and capitalizing on the B. Davis Schwartz Memorial Library's position as a neutral space for all campus departments and disciplines, the exhibit committee members defined the areas that would encourage participation within the campus community and beyond, enabling them to host exhibits, lectures, and events. Committee members felt that the library had several unique advantages on campus, including a designated space for exhibits, multiformat resources, and technologically trained staff members with a willingness to help and be part of the intellectual fabric of a university. They proposed the project to the dean of University Libraries, who appreciated the advantages of the project and appointed a larger interdepartmental committee consisting of librarians with public service responsibilities. Such teamwork strengthened the purpose and identity of the project.

Programming for Nonviolence: Library Exhibits and Events

The authors of "Multiple Models of Library Outreach Initiatives" (Fabian et al. 2013, 42) emphasize the educational value of exhibits for both the developers and the viewers, noting also that they serve as focal points to build relationships with campus and community organizations. The efforts at the B. Davis Schwartz Memorial Library are a close approximation of this model, and the library has used its exhibits as an anchor for collaboration. In 1993, to encourage the development of the *Nonviolence* exhibit, faculty members in the art department were given entry forms for distribution to students. Five themes were suggested for the exhibit entries: Humanizing Relations, War Prevention, The Child and Nonviolence, Ecological Balance, and Great Thinkers of Nonviolence. The outcome was very positive; sixty-four students from the School of Visual and Performing Arts submitted original artwork (digital art, lithographs, and other media). The library researched and found appropriate quotations on nonviolence, and these were calligraphically rendered by a faculty member in the art department. These quotations were thematically connected to the artwork, and the exhibit was displayed in the main lobby of the library. The exhibit catalog for *Nonviolence* included

support letters from LIU higher administration, U.S. senators, New York state officials, student artwork, quotations, and comments from faculty and students. The committee also obtained a special exhibit, *My Life is My Message*, on the life of Mahatma Gandhi from the Mahatma Gandhi Memorial Foundation in Washington, DC. This was displayed in the elegant Hutchins Gallery of the library. In conjunction with this exhibit, Srimati Kamala, the president of the foundation, was invited as a guest speaker. A community artist designed original peace lanterns and created an endangered species carousel. Student artists created large and striking four-by-six-foot visuals—*Parijat* (Wish-Fulfilling Tree), whose leaves were inscribed with slogans that advocate nonviolence and peace, and *Palolomira* (Peace Bird), which comprised seventy-five smaller birds, each inscribed with a peace message provided by library staff members. Librarians also developed six posters with well-designed graphics that included these statements: “Libraries are for Freedom of Information,” “Libraries are for Sharing,” “Libraries Provide Services to the Handicapped,” “Libraries Offer Equal Employment Opportunities,” “Libraries Promote Environmental Awareness,” and “Libraries Promote Multiculturalism.”

Lectures by LIU faculty members and guest speakers were held for the campus and local community. This helped increase viewership for the exhibits. All of these events were free and open to the public, and were well publicized by the university’s Department of Public Relations (PR) in local and campus media outlets. With input from the library, PR composed a press release. All other fliers and brochures were designed in-house by a student artist working as a graduate assistant in the library’s Instructional Media Center (IMC). The IMC plays an important role in the development and coordination of exhibits. Its K–12 curriculum library and production center support the School of Education and is well equipped with art, graphic supplies, and multiformat resources.

Outcomes

The exhibit *Nonviolence: The Global Choice!* was on display for three weeks (April 12–30, 1993). Since the exhibit was displayed in the main lobby of the library, the library does not have an accurate gate count for the number of people who visited it. The main lobby is used by library clientele and visitors, and also serves as a thoroughfare for other academic units located in the library. The programs in conjunction with the exhibit attracted students from several academic disciplines, including education, philosophy, social work, and the visual and performing arts. Students in classes were encouraged to think about conflict resolution, negotiation, and other aspects of nonviolence. Some comments by students and faculty collected in an unpublished commemorative booklet included:

This is a very interesting collaboration of artwork that deals with pressing social issues that are affecting our world both spiritually and physically. The artists have done an excellent job of getting their message of love and unity for all mankind across to the viewers. (student, biology)

The work ranges from current collegiate concerns to a fairly professional and profound vision of what violence in our world is about. (student, theater)

These seem to be heartfelt expressions toward the world today. The works for Humanizing Relations show a surprisingly strong desire to rid the world of hatred, which is a nice change. (student, art)

These works range from shocking images intended to stir righteous anger to halcyon images of what the future could be. Both ends of the spectrum challenge us to take action to take a stand in the violent world that surrounds us. (faculty, theatre and film)

The concept on nonviolence lends itself to a flowering of creativity. We can see this in the diversity of artistic responses produced by our student artists. In many the human face makes an urgent appeal. All suggest that we can design strategies for peace. (director, honors program)

The project's publicity and outreach efforts were successful beyond all expectations. The exhibit and the program generated much media excitement, with over twenty articles in a variety of newspapers and magazines. Newspaper coverage ranged from a major feature article in *Newsday* (a Long Island paper with a circulation of over 490,000) to many articles in local papers. The exhibit received much attention in the LIU Post campus newspaper and other campus publications. *The Wilson Library Bulletin*, a library trade newsletter, and the *Indian American* magazine published articles on the exhibit. There was also a mention in the *New York Times*. The media attention not only promoted the exhibit, but also fostered an awareness of the B. Davis Schwartz Memorial Library and the LIU Post campus. Since local libraries were interested in showcasing this exhibit, the library developed a traveling exhibit that was shipped to ten local libraries. A visitor who viewed the exhibit and was affiliated with the United Nations invited the library to be a member of the United Nations Task Force for Youth. Selections from the exhibit were displayed at the UN as part of their "Season for Peace and Nonviolence" (1999) and later in "The International Decade for a Culture of Peace and Nonviolence for the Children of the World" (2000). In observance of the Culture of Peace, LIU administration held an installation ceremony for a Peace Pole at the Interfaith Center of LIU. Subsequently, this exhibit was taken to schools in Nigeria. A website with educational resources was developed by the library, copyright releases were obtained from all students for their artwork, and a gallery was created online. The website generated inquir-

ies from interested organizations, and some of these networks set the stage for future collaborations and a growing consciousness of connecting worldwide.

Connecting Locally and Globally

The *Five Laws of Library Science* (Ranganathan 2006), which serves as a foundation for librarianship, considers the library to be a growing organism. Libraries recognize the need to adapt and be relevant for their time and for their users. According to Edwards, Robinson, and Unger in “The Future of Libraries Now” (2013, 43), the worth of a library is defined by the role it plays in the community, how it builds on individual and community assets, and how it uses technology as a tool toward that end. Several universities and libraries now reflect societal and global changes in their mission statements. The University of Michigan states, “We exercise stewardship of our global community.” According to Buffalo State University, “The goal of the college is to inspire a lifelong passion for learning, and to empower a diverse population of students to succeed as citizens of a challenging world.” A Columbia University statement reads, “It seeks to attract a diverse and international faculty and student body, to support research and teaching on global issues, and to create academic relationships with many countries and regions.” At LIU Post, the library mission statement also reflects this:

B. Davis Schwartz Memorial Library supports and expands the educational and research capabilities of LIU Post, providing the highest level of instruction, services, resources, and facilities. As the intellectual center of the campus, the Library prepares LIU Post students for academic success, for lifelong learning, and for being responsible global citizens. (BDSML 2018)

Many higher education institutions place importance on internationalizing the curriculum and understanding world cultures (Hadebe, Kear, and Smith 2009, 32). LIU’s study abroad and exchange programs allow students to study in many regions of the world—Europe, Africa, Asia, and Latin America—and the library welcomes students from many nationalities and offers them internships. Several library exhibits such as *Hands and Feet*, *American Roots: American Voices*, and *Gardens of the World* also reflect this global approach; they present different cultures, multiple perspectives, and encourage critical thinking. LIU’s motto is *Urbi et Orbi*—“To the City and to the World.”

With this project on nonviolence, it became evident to the library that connecting locally and virtually is feasible for any organization—large or small. A project of global significance needs to be discoverable. Subsequently, all of the library’s large-scale projects have used web and social media

technologies for creating an online presence, and have welcomed virtual and local individual, group, and community connections.

Reflection: Nonviolence

Three factors determine the need for academic library interactions with the community: the need may be expressed from the outside, or by the library's own persuasion, or as a response to a specific situation or problem (Schneider 2013, 199). In the case of the *Nonviolence* project, it was a response to world conditions and the understanding that conflicts can be dealt with more effectively through peaceful means.

Most certainly the exhibit and programs held in conjunction with *Nonviolence: The Global Choice!* did impact individuals and society, clearly demonstrating to the dean of University Libraries and upper administration officials that library exhibits played a prominent role on campus and in the community. Some comments from other libraries that hosted the nonviolence traveling exhibit were:

The coordination and selection of appropriate student artwork and calligraphy is impressive and certainly timely. (assistant director, Levittown Public Library, New York)

The theme of world peace could not have been more appropriate at the time your exhibit visited our library. With "Peace on Earth, Good Will toward Men" ringing in our ears, here it was in concrete terms. I watched people glance at one piece as they dashed in and out of the building, only to be drawn in by the magic of the message spending much more time with the exhibit—the young and old alike. . . . At a time when guns are sold for toys and people hate with such brutality, it should be on a world tour! (program coordinator, the Merrick Library, New York)

NATIONAL TRAVELING EXHIBITS

In more recent years (2010–2015), the B. Davis Schwartz Memorial Library and its partners have applied for traveling exhibits developed by the ALA with funding from the National Endowment for the Humanities and other agencies. In order to be eligible for and be selected as a site for an exhibit, academic libraries are advised to collaborate with public libraries and cultural institutions. Here the need to collaborate is generated by an outside agency. The aim of these nationally touring exhibits is to connect thematically with national and community issues and interests. Programming is required in conjunction with the exhibit; however, the extent of this programming is reasonable, sustainable, and scalable according to the size of the library and staff availability. Most traveling exhibits are suitable for public and academic

libraries, while some are more appropriate for special collections departments or historical societies, as the exhibits sometimes require additional security and temperature controls. Examples of questions on the application include:

- Why would your institution like to display this exhibit?
- What local partners would help support the exhibition and what would their roles be?
- Describe the audience you will target, and how you will publicize the exhibition to that audience.
- Describe the space your institution has available for exhibitions or include floor plan.
- Briefly, what is the scope of your public programming for adults?

Thus, in order to be eligible, this type of exhibit needs more planning and collaboration with partners right from the application stage. Leong (2013, 220) emphasizes the need for universities to build bridges and engage with the community.

Lincoln: The Constitution and the Civil War—Exhibit and Events, 2010–2013

In 2010, the B. Davis Schwartz Memorial Library applied to the American Library Association to host the traveling exhibition *Lincoln: The Constitution and the Civil War* (BDSML 2013a), organized by the National Constitution Center and the Public Programs Office of the American Library Association. As a start, the university's library members created a list of their strengths and assets, and explored their library liaison connections with other academic departments and networks on campus and in the community. Then they drafted selection criteria for partners:

- Will they help the library with support letters for being selected as exhibition site?
- Will they add to the programming?
- Will they want funds or are their programs self-funded?
- Are they in the vicinity, so that people would attend their programs as well as ours?
- Will they help with outreach and cross-marketing of programs?

Levels of Partnerships

There may be different levels of partnerships in designing library exhibits and programming. Crowther and Trott (2004, 13–14) use such terms as “glance,” “date,” “engagement,” and “marriage,” with each of these terms

reflecting increasing levels of involvement and responsibility. Also, partnerships need not be formal or require signed contracts; they can be informal, with each party agreeing to carry out certain responsibilities (Tucker 2009, 182). At our institution, the library appoints an advisory committee consisting of scholars, subject specialists, and partners. The library exhibits coordinator serves as the project manager and has an important role in decision making, programming, obtaining funding, and coordinating the project. As is usual in academic libraries, the exhibits coordination role is not the primary role of the librarian. The coordinator has other major responsibilities and, while maintaining her interest in the project, must constantly juggle her priorities. The level of commitment by partners is varied and depends on their strengths, availability, and enthusiasm for the project. However, with this flexible approach, the roles and expectations from partners are clearly defined, and all partners are acknowledged in brochures and oral introductions. As part of a protocol for communication, the coordinator maintains email lists of partners and participants, periodically shares progress reports, and sometimes meets in person with partners. Personal meetings help to cement relationships and better understand partner institutions' requirements and challenges, such as fiscal needs, conflicts in programming schedules, cross-marketing of programs, and difficulty in finding appropriate speakers. Attending programs generated by partner institutions also helps to form a cooperative relationship. According to Meyer (2014, 118), developing trust through personal relationships is one of the keys to success.

Based on the selection criteria and the desire to connect with diverse audiences, LIU Post's library partners include several campus departments, campus organizations with links to the outside community, and public libraries. Discussed below are the different types of partners who collaborated with the library and contributed their time, expertise, and resources for the Lincoln project.

The Hutton House Lectures is a lifelong learning academy at LIU Post, and has been named an Outstanding Model Adult Program for the nation by the Association of Continuing and Higher Education. This program, which has been in effect for the past several decades, has grown to over 8,400 yearly registrants who enroll on a quarterly basis in order to take free to low-cost personal enrichment programs in the liberal arts and sciences. The Hutton House serves as an ambassador for LIU in its efforts to connect with the wider community. Students range in age from their early forties to early eighties, and represent a variety of backgrounds, ethnicities, and socioeconomic statuses. As a partner, Hutton House provides support letters, publicity brochures, and outreach to its members. The Electronic Educational Village (EEV) of Long Island University, originally the Electronic Educational Village and now incorporated into Design, Systems, and Learning for the 21st century (DSL21), was created by the Department of Educational Technology

at LIU Post to help children learn in an environment that integrates technology, community resources, the Internet, and hands-on learning. The EEV partners with individuals, group organizations, and the global community, and is supported by LIU and the Half Hollow Hills School district. The EEV is archived in the Smithsonian Institution as part of the Innovation Network in its permanent Research Archive.

The EEV invited members to the *Lincoln* exhibit, and the Educational Technology and Computer departments helped create the exhibit *Abraham Lincoln: The Great Emancipator and His Legacy* in Second Life, a 3D interactive virtual world. This exhibit was LIU's experiment in reaching out to virtual audiences. Other campus partners with community outreach for K–12 audiences were the Tilles Center Arts Education program, Hillwood Art Museum, High School Scholars Program (SCALE), and Phi Delta Kappa. In addition, LIU Post's library used its network with the Nassau County Libraries and their directory listings of local libraries to connect with other area libraries for their outreach efforts. The Port Washington Public Library—an innovative public library in Nassau County, New York, decided to hold a Lincoln event at its location and cross-market the programs. This public library also wrote a support letter to help it obtain the exhibit from ALA.

Selection, Scheduling, and Planning for Exhibit and Programs

The application with details of programs in conjunction with the exhibit and support letters from campus and community partners was successful, and B. Davis Schwartz Memorial Library was selected as a host site for the New York region. In the application, libraries are required to be flexible with dates, as there may be four or more traveling exhibit copies traversing the northern, southern, eastern, and western regions. Although the traveling exhibit is coordinated in an efficient and economical manner between locations, the touring schedule for *Lincoln: The Constitution and the Civil War* proved to be extensive, and therefore the exhibit was scheduled to reach LIU Post four years after its selection as a host site. The library was invited by the ALA to a meeting of all selected applicants in Philadelphia, where librarians were able to view the exhibit and have discussions with other participants. This was a wonderful opportunity, and helped in the planning for the hosting of the exhibit at LIU Post. In addition to the traveling exhibit, supplementary materials included useful logistical information such as a guide to assembling the exhibit, an exhibit condition report, and shipping information.

For the four years leading up to the arrival of the exhibit, and in order to sustain the interest of the public, B. Davis Schwartz Memorial Library held several Lincoln programs in conjunction with Black History Month. The fourth year would mark the Sesquicentennial of the Civil War, and would provide an appropriate finale for the Lincoln events. To support these pro-

grams, the library successfully applied for a mini-grant from the New York Council for the Humanities (NYCH) and LIU's John P. McGrath Fund. In the grant application, the library included details of programs with short descriptions, biographies of presenters, and possible dates. This helped the organizations understand the purpose of and enthusiasm for the project. The library also procured a second grant from the NYCH to support a series of book discussions titled "Lincoln on the Civil War." These discussions from NYCH were very structured, and a planning webinar with questions and answers was therefore hosted by NYCH for selected institutions. Books and readings were also sent by NYCH to sites, and these were distributed ahead of time to all participants.

This exhibit provided the library an opportunity to experiment with new technologies. The exhibit *Abraham Lincoln: The Great Emancipator and His Legacy* existed virtually using Second Life (SL). This SL exhibit provided an anchor and a platform to link with resources and learning activities. The Lincoln activities and the Second Life site were publicized to members from the Teaching American History Initiative, consisting of Nassau County history teachers, and B. Davis Schwartz Memorial Library was selected by the ALA for the ALA Virtual Conference, "The Future is Now: Libraries and Museums in Second Life."

Marketing and Publicity

These traveling exhibits are accompanied by many professionally created resources such as sample letters, press releases, bibliographies, promotional posters, images, and bookmarks. This makes the exhibit richer and easier to market to audiences. The library created a website and LibGuide publicizing the events and included some of these resources. In addition, as an academic library, the library was able to utilize the university's PR Department.

At LIU, the PR department uses traditional and social media outreach, and creates attractive brochures, composes and distributes press releases to local, state, and regional publications as well as major New York City outlets and newspaper chains covering Long Island's North and South shores, and sends out social media postings across multiple university channels. It also defines suitable target markets and reaches them through appropriate channels, as recommended by the authors of "Using NLM Exhibits and Events to Engage Library Users and Reach the Community" (Auten et al. 2013, 271).

Reflection: Lincoln

Library staff time involved in the coordination of the exhibits and events was much greater than anticipated, despite the fact that the library had all of the needed resources on campus, such as equipment, catering, marketing and public relations, speakers from campus, and graphic design assistance. Be-

sides verbal comments from attendees and quantitative data such as attendance at events, the library did not use any formal evaluation methods. The number of people who attended each type of event was as follows: one exhibit, 1473; nine programs, 857; four book discussions, 113.

As a formula for success, the opening event must be very well planned and organized, and should have a prominent speaker. This lays the foundation for repeat audiences. For the *Lincoln* opening event, the library was able to invite Lincoln Bicentennial Commission Chairman Harold Holzer, who delivered the keynote lecture, “Emancipating Lincoln: The Proclamation in Text, Context, and Memory.”

In addition, eminent artist Dan Christoffel exhibited original artwork, *Abraham Lincoln: The Great Emancipator and His Legacy*, consisting of Lincoln portraits and works inspired by the civil rights movement of the 1960s. Because of the library’s sustained interest in Lincoln and quality programming, the New York State Education Department through a very competitive process chose LIU Post as a site to receive the exhibit, *The First Step to Freedom: Abraham Lincoln’s Preliminary Emancipation Proclamation*. This exhibit contained the only surviving Emancipation Proclamation document (1862) in Lincoln’s own hand.

The library had a wide range of partners, and was able to connect with diverse and intergenerational audiences. Its campus connections to school audiences also proved successful. These partnerships subsequently led to future collaborations for other exhibits. Brumagen and Hylen’s Guidelines in “Children in a Research Library” (2014, 130) advocate that libraries must make their programs relevant to the school district’s curricula for outreach efforts to K–12 students. At LIU Post, the library works with schoolteachers and customizes school tours and workshops in conjunction with exhibits. Librarians use grade-appropriate resources provided by the ALA or create their own educational resource packets. The students generally tour the exhibit, attend a lecture, and participate in a customized art workshop.

A Fine Romance: Jewish Songwriters, American Songs, 1910–1965

In 2012, the library utilized a similar approach and successfully applied for another traveling exhibit, *A Fine Romance: Jewish Songwriters, American Songs, 1910–1965*, developed by Nextbook, Inc., a nonprofit organization dedicated to supporting Jewish literature, culture, and ideas, in partnership with the ALA Public Programs Office. The demographics of Long Island, which has a large concentration of Jewish residents in Nassau and Suffolk counties, was a supporting factor in the application. Also, the library’s continuing positive relationships with community partners enabled it to garner their support and enthusiasm for this exhibit.

A Fine Romance: Jewish Songwriters, American Songs, 1910–1965 (BDSML 2012) was enriched by movie posters from the library's Special Collections and original drawings of Jewish songwriters by nationally renowned artist Dan Christoffel. The members of the advisory committee were selected from library and campus departments. There was also a grand opening, which included exhibit talks and music by faculty and students. A total of ten events took place, which included lecture/presentations, musical performances, exhibit tours for school groups, and art activities conducted by LIU Post museum educators. The library also held an event that included the curator of the exhibit, David Lehman. The closing event was a lecture performance by David Holzman, a Grammy-nominated master pianist. The library included local performers from the community, and was able to use existing networks for obtaining grants as well as funding from performer networks. Sponsors included the B. Davis Schwartz Memorial Library, New York Council for the Humanities, John P. McGrath Fund, Long Island Composers Alliance, New York State Council for the Arts: Nassau Grants for the Arts Decentralization program administered by the Huntington Arts Council, Prof. Edgar H. Lehrman Memorial Foundation, the Merit Fellowship of LIU Post, Yip Harburg Foundation, Hutton House Lectures, The Poetry Center of LIU Post, The Post Library Association (PLA), and Poets and Writers, Inc. The library also added Temple Sinai of Roslyn to the list of partners.

When applying for grants to support humanities programming, it is important to have programs with clearly defined learning goals and humanities themes. For example, the B. Davis Schwartz Memorial Library's grant application to the New York Council for the Humanities for *Jewish Songwriters* included:

- A discussion of popular songs that reflect the changes in American life in the twentieth century and chronicle American culture and history. Discussants would look back at the period when the United States offered talented Jewish immigrants a fresh start, upward mobility, and limitless possibilities for exhibiting their creative talents. What they wrote and composed were songs and musicals, aiming to normalize societal tolerance of minorities and urge racial harmony.
- A discussion on what inspired and moved these gifted Jewish composers—whether a melting pot ideology, a desire for cultural equality, or pride in ethnicity.
- A lecture on Tin Pan Alley, a group of U.S. music publishers and songwriters at the turn of the twentieth century, discussing its publishers, lyricists, and durable hit songs.
- A lecture on Rodgers and Hammerstein discussing the historical context and the social significance of their shows.

- A lecture by Samuel Arlen with highlights of the life and legacy of Harold Arlen, starting with his early personal struggles and the changing musical climate and ending with contemporary music and how Arlen and the standards live on.
- A lecture, “Social Satire from Vaudeville Musical Revues to Broadway and Hollywood: The Marx Brothers and their Musical Collaborators,” discussing the songs from these Broadway shows and their subsequent films as social critique through satire and examining how these songs challenged the values and ideals of a burgeoning middle-class America.

Reflection: Jewish Songwriters

Since the programming for this exhibit included several lectures illustrated by performances, the library incurred additional equipment and printing costs, as well as videotaping expenses. The library also had to obtain copyright releases for videotaping. The library was pleased with the results of the programs, which proved to be educational and entertaining to both old and new audiences. This exhibit provided a unique opportunity for LIU music students to connect with public audiences, and was on view for five weeks (March 7–April 12, 2012). The number of people who attended the various types of events was as follows: one exhibit, 546; ten programs, 1163.

Bridging Cultures Bookshelf: *Muslim Journeys*

In 2013, the library applied to ALA for the Bridging Cultures Bookshelf: *Muslim Journeys* (BDSML 2013b). The Bookshelf was presented by the National Endowment for the Humanities in cooperation with the ALA and the Ali Vurak Center for Islamic Studies, George Mason University.

This application was not for an exhibit, but for books. This Bookshelf, along with other resources including the use of the *Oxford Islamic Studies Online* database for one year, was well suited for the library’s programming. It would serve as a platform for a variety of exhibits, programs, and discussions, and help the campus and community further their knowledge of Muslim cultures. Librarians at LIU Post felt that readers are saturated by the constant news reports of conflicts facing the world, and therefore are not able to discern and evaluate such information or understand the many facets of Islam, even though they may be eager to be informed as citizens. In 2011, and again in 2012, the Phi Delta Kappa chapter at the LIU Post campus held an event, “What an Educator Should Know about Islam.” This was a very successful program and was well attended by teachers from local schools. LIU’s Interfaith Center was also promoting interfaith awareness, sensitivity, and religious tolerance, and in the past had received funding from the State of New York for these activities. Hence, the library was well positioned to

expand the programming, and successfully applied to the ALA and the New York Council for the Humanities for the Bookshelf.

Library team members decided to enhance the Bookshelf and attract more viewers by creating an exhibit, *Geometry and the Art of Islam*, with resources from the library and the help of an LIU faculty member and her students. In addition, they displayed artwork by children from Zanbeel Art, an organization based in Los Angeles, through a program titled “Creating Cultural Sensitivity about South Asia through the Arts.” Schools in Los Angeles connected with schools in Pakistan for this project. Books from the *Muslim Journeys* Bookshelf were placed in display cases alongside the exhibits.

This Bookshelf was developed by many scholars and had six themes: *American Stories*; *Connected Histories*; *Literary Reflections*; *Pathways of Faith*; *Points of View*; and *Art, Architecture and Film*. LIU Post’s library decided to have the programming spread over six weeks, selecting one theme to highlight each week with a lecture, discussion, or event to support that theme. Several events followed, with support from new partners such as the Council for Prejudice Reduction, Zanbeel Arts, and local Muslim organizations. The New York Council launched a book discussion series, and the library was able to invite a scholar to lead the series of four book discussions. The library also held an all-day “Educational Conference on Issues Related to Muslim Youth” with some speakers connecting via Skype. Topics included “Creating Cultural Sensitivity through the Arts,” “This Is Where I Need to Be: Oral Histories of Muslim Youth in NYC,” “Prejudice Reduction Workshop on Integrating Muslim Students in Schools,” “Hate Crimes and Harassment in Schools and Communities Are on the Rise,” and “Educators Offer Practical Solutions Against Bullying of South Asian American Youth.”

The Bookshelf opening and closing events included talks by prominent figures: “Napoleon’s Invasion of Egypt: A Crucial Meeting of Islamic and Christian Cultures” by Dr. Bob Briar, an Egyptologist, and “Islamic Traditions for Peace and Nonviolence: Responding to Contemporary Challenges” by Daisy Khan, executive director of the American Society for Muslim Advancement (ASMA).

Reflection: Muslim Journeys

The discussions following each lecture were thought-provoking and educational for young students, who were able to relate to the experiences of an older generation. Many in the audience had little prior background in the precepts of Islam and/or Muslim culture, traditions, and arts. The workshops on Islamic art proved to be very popular and educational for school audiences, and the library subsequently added another lecture by a speaker from the Metropolitan Museum of Art. The conference for educators in schools offered several practical solutions, and many participants wanted LIU to

schedule repeat workshops. The library used the *Muslim Journey* LibGuide as an analytical tool to keep track of pages viewed, and knew in advance what programs would have large audiences and which needed more promotion. The book discussions, however, did not have as many participants as had been anticipated. This may have been due to conflicts with the location, the timing of the book discussions, or the availability of campus parking. In terms of the success of partnerships, the library reached new users, and the communication mechanism worked well with partners. Many in the audience had suggestions for other book titles, films, and speakers, and several organizations wished to connect their programs with LIU Post's Interfaith Center. The number of people who attended the various types of events was as follows: nine programs, 568; book discussions, 59.

Comparative Evaluation of Traveling Exhibits at LIU Post

The exhibit *Lincoln: The Constitution and the Civil War* had more viewers than the exhibit *A Fine Romance: Jewish Songwriters*. This was partly because Lincoln is very popular in schools, and the library had more school tours for this exhibit. Moreover, the *Lincoln* book discussions were held in the same area as the exhibit, and were well attended. The program attendance (ten programs) for the *Jewish Songwriters* was higher because of the entertainment value of the performances. Program attendance (nine programs) for *Muslim Journeys* was lower than for *Lincoln* or *Jewish Songwriters*. This directly reflects the demographics of the area. The *Lincoln* book discussions were closed out and were more popular than the *Muslim Journeys* discussions. Keeping track of audience attendance is important, but in the future the library needs to incorporate other variables for measuring the success of its programs.

Currently, an ongoing ALA study, "National Impact of Library Public Programs Assessment," has noted the prolific growth of library programs in recent years. The advisory group is studying current best practices among all library types. To make effective programming decisions, libraries need useful and measurable data to study the impact of library programs. Traditional quantitative indicators such as number of participants or attendees for a program are inadequate measures of success. The study group would also like to include deep-level impacts such as "a deepening of trust and reciprocity among audience members of community groups; an awareness of change occurring in an individual's or group's thinking; the generation of new questions; an increasing sense of confidence in one's abilities; and recognition that something has pushed one's mind" (American Library Association 2014, 14). At the time of these library programs at LIU Post, the library was not recording these deep-level changes as a measure for success.

CONCLUSION

John Cotton Dana's vision was to place art close to books and journals in a library (Mullins and Watkins 2008). In today's world, visual literacy has become increasingly important. Besides displaying information, exhibits offer a possibility for individuals to construct meanings based on prior associations or knowledge, and these meanings can evolve (Rounds 1999, Mullins and Watkins 2008). In academia, exhibits reach out to students from many cultures and nationalities, and present a welcoming atmosphere for a library. In this globalized world, the Harwood Institute for Public Innovation's model of reaching "outward" is increasingly desirable for academic libraries as they transition from a scholarly community to a more holistic framework that considers their place within a wider community (Harwood Institute n.d.). With the recent movement of makerspaces encouraging creativity and collaboration, much can happen. According to Hattie Garrow (quoted in Morehart 2016, 40) of the Young Adult Services Association,

Libraries will continue to provide access to information and ideas, but what I am most excited about is the shift from consumption to creation—the notion that libraries can serve as environments for people of all ages to collaborate, create, explore, imagine, learn, and grow. Library professionals need to be seen as facilitators of this model, not gatekeepers to the books.

Libraries are changing very rapidly; hence, the Center for the Future of Libraries established by ALA helps librarians look ahead for library trends related to the people and the communities they serve. Ruth Fraser (quoted in Figueroa 2016, 49), director of Historic Hagerstown-Jefferson Township (Indiana) Library, states: "The biggest difference that has occurred through incorporating trends into our planning has been to focus less on 'what' and 'how' and really focus on the 'why.'"

In concurrence with these views, and recognizing the importance of visual literacy skills in the twenty-first century, the B. Davis Schwartz Memorial Library has recently added additional space for student art exhibits. National traveling exhibits with associated programming have opened up many creative possibilities for LIU students, faculty, and the local and the global community. Focusing on the "why" and whether B. Davis Schwartz Memorial should continue to host physical exhibits and on-site programs in the future, librarians at LIU Post predict that in order to be relevant, the content, context, and presentation of exhibits and programs will need to incorporate trends and changes desired by viewers, but nonetheless they will remain important. Exhibits and programs at LIU Post will continue to create community, serve intergenerational and interdisciplinary audiences, and promote skills needed to understand and interpret information in a variety of formats.

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Chapter Nine

Regis University and Arrupe Jesuit High School

Information Literacy Outreach to Help Students Succeed in High School and College

Paul Mascareñas and Janet Lee

Studies have shown that students are more likely to graduate from college on time and with higher grade point averages if they are academically prepared before entering the hallowed halls of academia (Cook 2014; Daugherty and Russo 2011). Introducing high school students to college-level research and to college or university libraries can help prepare students academically and has other tangible benefits for both the students and the university, including the development of critical-thinking and lifelong-learning skills. The importance of high school libraries for student success cannot be overstated. There are various ways to meet the needs of future college students that should be explored. Outreach efforts by the academic librarians at Regis University to Arrupe Jesuit High School (Arrupe Jesuit) students, as described in this chapter, can provide a model for other institutions interested in pursuing outreach projects to high school learning communities. As a result of these types of programs both on campus and off, students are provided with a transferrable skill set they can use throughout their academic careers and beyond.

LITERATURE REVIEW

Many studies demonstrate that information literacy programs help high school students transition to college and university (Angell and Tewell

2014). Research supports the benefits of information literacy courses in helping students better understand the research and information evaluation process (Angell and Tewell 2014; Martin, Garcia, and McPhee 2012). Researchers also attempt to define what it means to be information literate in terms of acquiring critical-thinking skills. Ethelene Whitmire (1998, 266) defines critical thinking as “the ability to identify central issues or assumptions in an argument, evaluate conflicting claims, eliminate useless information, evaluate the credibility of an information source, evaluate evidence of authority, interpret whether conclusions are warranted on the basis of the data given, and read with a high level of comprehension.” Christine Furedy and John J. Furedy (1985, 51) identify key tenets of a critical thinker within the “Socratic strain in higher education.” They posit that students should not only have the “capacity to carry out evaluations and analysis in a rational manner,” but that the abilities of the critical thinker “should carry over from one’s specialty to other fields of interest and inquiry” (52). These are similar to the outcomes academic librarians want their students to achieve and the transferable skills they seek to teach.

A student who is academically prepared can not only find materials, whether from online sources like Google or from library databases, but can use these resources responsibly and ethically. Students should also know how to approach and view a topic from a multidisciplinary perspective. A 2013 Organisation for Economic Co-operation and Development (OECD) report on international student assessment examined student knowledge and skills in mathematics and in reading literacy at age fifteen. According to the OECD assessment, literacy “is the capacity to understand, use and reflect on written texts in order to achieve one’s goals, develop one’s knowledge and potential, and participate in society” (OECD 2013, sec. 3). This holistic definition and approach to understanding information literacy resonates nationally and internationally.

Collaborative efforts between post-secondary institutions like the California State University Northridge (CSUN) Oviatt Library and Northridge Academy High School (NAHS) provide a template for other institutions interested in helping high school students develop the necessary critical-thinking skills. The Oviatt Library and NAHS developed a partnership with specific outcomes in mind, including preparing high school students for college-level research, lessening anxiety by introducing students to a larger academic library with actual visits to a college campus, and helping students with high school research (Martin, Garcia, and McPhee 2012). Considerations when developing an outreach model similar to this one include time and resource commitments, which can be considerable, especially if staff and budgets are already shrinking or stretched thin. The study reports that “adequate staffing is also a vital component to the success of the programming” (Martin, Garcia, and McPhee 2012, 38). In addition to the time in class, time

is needed for class preparation, a significant investment on the part of the university library—and because working with high school students is “high touch,” more than one librarian may be needed. Logistically speaking, how and when students come to campus to receive library instruction for their assignments also takes considerable coordination between the high school and the university library. Still, these efforts help build a relationship between the two institutions (Angell and Tewell 2014, 11).

Kent State University (KSU), with help from the Institute for Library and Information Literacy Education (federally funded through the Institute of Museum and Library Services and the Department of Education), developed an outreach program with high school library media specialists. The effort also involved teachers who introduced information literacy instruction into their curriculum. This outreach initiative included several parties to create discourse and relationships within the professional education realm. Funding and budget constraints limited in-person visits to the KSU campus, as well as the resources offered for student research. KSU was, however, able to create video modules available online to assess the levels students had reached in the information-seeking process. Ultimately, KSU developed an outreach module that provided high school students with academic library experience prior to attending college. Introducing high school students to information literacy concepts before college helps alleviate some anxiety they might feel while attending a large academic institution. It also helps high school students with their individual research assignments, and introduces higher education standards to the high school community (Burhanna and Jensen 2006).

Academic librarians across the board are concerned with engaging first-year college students and increasing student retention and graduation rates. To promote the academic success of high school students entering college, academic librarians at Sarah Lawrence College worked collaboratively to develop an outreach program with Yonkers High School (YHS). This program also included the assistance of the Yonkers Public Library (Angell and Tewell 2014). High school students enrolled in the International Baccalaureate (IB) program were the target audience for this outreach effort. Students in the IB program are uniquely positioned to work with academic librarians in order to learn how to use library resources and materials for their research projects, as students enrolled in the IB program are expected to “consistently complete academic coursework at a college level” (Angell and Tewell 2014, 6). This collaboration throughout the year between academic librarians and students helps better prepare the students for college by introducing information literacy concepts during their junior and senior years of high school. This study notes some of the challenges of implementing an outreach partnership with local high schools, including the large time and resource commitment by the academic librarians developing and implementing the program. Because of this, the authors recommend that librarians carefully evalu-

ate the impact of the collaborative effort that would draw time and energy away from their own student population (Angell and Tewell 2014, 12).

Lessons learned and best practices developed over the course of the ten-year project at Sarah Lawrence include assigning a contact person for each institution or participant involved. The authors of the study also suggest piloting the program, if possible, to gain a better understanding of the planning process of a collaborative program on a smaller scale before implementing larger initiatives. Finally, the study highlights the importance of assessment in order to provide substantive feedback for directors of the program as well as to demonstrate the importance and value of these outreach efforts (Angell and Tewell 2014, 16–17). Though the study provides additional support for academic library inclusion in the high school curriculum, it is important to note that the students participating were enrolled in the IB program, which is already indicative of heavy academic or college-level course work. In addition, YHS is ranked the fourth best high school in New York State and twenty-fourth best high school in the country (Angell and Tewell 2014, 6–7).

Typically, high school students exist in a highly guided and structured academic environment compared to the independent learning environment many college students experience. In addition, high school students transitioning to college do require a multitude of information literacy skills to succeed, including the ability to work within multiple formats, that is, electronic, print, and platforms—electronic databases, ebooks, and other web-based resources. A study at James Madison University assesses academic preparedness of high school students to measure a baseline of information literacy skills before entering college (Smith et al. 2013). This, in turn, helps librarians to better design information literacy coursework to meet the needs of incoming freshmen, who are more often required to work within a digital context than high school students. Learning what those skills are is a process that can include collaboration between college librarians and teacher-librarians. Megan Oakleaf and Patricia L. Owen studied how these partnerships benefit academic librarians by helping them design instruction to students' specific needs while providing teacher-librarians academic support. Ultimately, the study found that students will benefit from the academic support throughout their high school and college years to excel academically. Oakleaf and Owen (2010) suggest these partnerships help bridge the gap between high school seniors and college freshman by providing an account of activities that teacher-librarians and academic librarians can implement to improve information literacy instruction. One such activity was to learn how to better position the librarian to meet student research needs by reviewing “course syllabi for the presence of inquiry-based research assignments to determine the required research tasks” (Oakleaf and Owen 2010, 53). The

evidence provided by this type of study, in turn, helps teacher-librarians align their twenty-first-century skills with their college-bound students.

In addition to the cited examples that directly help high school students transition to college, an article in *Research Strategies* discusses academic librarians teaching high school teachers and librarians information literacy concepts via “train the trainer” workshops in which librarians work with teachers to develop information literacy lesson plans to embed relevant concepts into the larger high school curricula (Martorana et al. 2001, 114). The project was developed with much pre-planning to design workshops specifically targeted to high school teachers and their experience teaching at the secondary level. With support from the school’s administration, coordinators of the University of California, Santa Barbara (UCSB) School University Partnership Program were able to offer stipends for teachers who attended workshops, and additional stipends to encourage the teachers to implement critical evaluation of information activities in their curriculum (Martorana et al. 2001, 115).

In addition to the research on information literacy skills and high school students, many studies also focus on the effect information literacy offerings by academic librarians have on college students’ critical-thinking skills, academic success, grade point averages, graduation rates, and lifelong learning. By and large, the research suggests that high school students should prove to be no different (Cook 2014; Daugherty and Russo 2011; Moore et al. 2002; Wang 2006; Whitmire 1998). Therefore, a review of the literature on the challenges that incoming first-year college students face can be helpful for developing collaborative programs for high school students.

Not only do incoming college freshmen face increased academic rigor, they have to adjust to the customs and norms of attending college and, for some, leaving their homes for the first time. The resulting emotional stressors are also documented in the literature, and colleges and universities can play a role in alleviating them. Though not directly related to collaborative efforts to teach information literacy concepts to support student success, a holistic approach that provides additional support on various levels reduces the distractions that impede academic success. Published in the *Journal of Cultural Diversity*, Terence Hicks and Samuel Heastie rated the health and quality of life of students attending a four-year public research and doctoral degree-granting institution in North Carolina (2008, 144). The authors note some of the symptoms students may experience during their first year in college, from anxiety and low self-esteem to depression, and identified how students cope with stress and how academic institutions are uniquely positioned to help these students adjust. Academic librarians working with high school students can use this information to begin discussions with students on how to cope with the pressures of schoolwork and the ways that librarians might be able to help.

The Arrupe Jesuit High School (AJHS) students, who are the focus of this study, have an opportunity to work in various industries around Denver through the Corporate Work Study Program. The collaboration between the high school and area businesses provides students with hands-on experience working in a law office or in a health profession setting. Therefore, it is imperative that these students understand the importance of information transfer and workplace information literacy. Several studies have reiterated the increased need for research and evaluation skills once graduates are on the job, and librarians working with high school students should also consider these needs when designing sessions. In a study titled “From the Classroom to Boardroom: The Impact of Information Literacy Instruction on Workplace Research Skills,” Travis (2011) found that the skill level required for finding information from electronic and print resources, sometimes using basic tools and resources, was often missing or lacking in new employees. Entry-level employees need to be able to sift through troves of information in an unfamiliar setting without librarian help or vetted resources.

The required proficiencies for entry-level positions identified by the corporate world in Travis’s study are aligned with outcomes identified by academic librarians and by the Association of College & Research Libraries (ACRL) *Information Literacy Competency Standards for Higher Education*, now the *Framework for Information Literacy for Higher Education* (ACRL 2015). These include critical-thinking and problem-solving skills “needed to function in a knowledge-based society” (Travis 2011, 19). This study included the results of a survey of alumni who were exposed to an information literacy instruction session. The survey revealed that seventy-six of ninety-eight respondents agreed that “research databases were very important for completing my academic research.” When asked which information literacy concepts taught in college applied to the workplace, the two most important cited were “finding relevant information” and “evaluating information” (Travis 2011, 25–27). In addition, one-third of respondents used research skills on a daily basis, further implying the “transmission” of information literacy skills to the workplace.

These examples show that information literacy instruction for high school students transitioning to college can have a long-lasting impact and a positive return on investment of time and resources once they come to college. For example, student retention and academic achievement have been linked not only to what students learn in the classroom, but also to information literacy classes taught by academic librarians. The research literature suggests that students taught information literacy skills early in their academic careers are more likely to succeed in their classes and graduate in larger numbers (Cook 2014). Not only is it vital for college students to be savvy researchers but, more importantly, to be critical thinkers and to evaluate the information they retrieve. What it means to be “information literate” has changed significantly

over the course of the last fifteen to twenty years due to the proliferation of online sources of information. By working with high school teachers and administrators, academic librarians can help to better prepare students for both college and career success.

ARRUPE JESUIT HIGH SCHOOL

Arrupe Jesuit High School, located in northwest Denver, opened its doors in fall 2003. The school is less than two miles from Regis University, a private, Catholic institution and one of twenty-eight Jesuit colleges and universities in the United States. Arrupe Jesuit is one of thirty Catholic college preparatory high schools for underrepresented urban youth that follows the noted Cristo Rey model (Cristo Rey Network 2016). Every graduate from Arrupe Jesuit's first nine graduating classes was accepted into at least one college or university of his or her choice. According to Timothy M. McMahon, SJ, president of Arrupe Jesuit, "as of 2015, 70 percent of our graduates have either completed a bachelor's degree or are still enrolled in college, compared with a national rate of 11 percent for the demographic Arrupe serves." The Class of 2015 earned more than \$6.2 million in merit-based scholarships (McMahon 2016).

Data provided by Regis University's Enrollment Services show Arrupe graduates enrolled at Regis are indeed succeeding. Of 134 Arrupe Jesuit graduates who enrolled at Regis University from 2007 to 2015, 75 percent have graduated from the University or are currently enrolled. Thirty-two Arrupe graduates have graduated from Regis University in four years or less, and forty-two students graduated in seven years or less. Fifty-four of the 134 Arrupe graduates (40 percent) have been awarded the Regis-Arrupe Partnership Award that includes full tuition to attend Regis University (William Hathaway-Clark, personal communication). Regis University Library has played a significant role in the success of these students, in collaboration with the faculty of Arrupe Jesuit, the programmatic support of Regis University, and the families of the students. Examples of how the library has collaborated with Regis professors during summer writing programs and providing space in the library will be detailed in the following sections.

To fully appreciate the accomplishments of these students, it is important to understand some background about the students, the Arrupe Jesuit curriculum, and the Cristo Rey work-study program at Arrupe. Details about the Arrupe student body were presented as the 2016 Magis Night dinner program, titled "Bright Lights, Big City." Magis Night is an annual fundraising event that heavily subsidizes the operations of Arrupe Jesuit High School for the year. During the 2015–2016 academic year, 381 students were enrolled, the largest enrollment to date. Of these students, 58 percent were female and

42 percent were male, and were evenly divided as having attended Catholic schools or public schools in previous years. This total included 80 seniors, 81 juniors, 102 sophomores, and 118 freshmen. The vast majority of the students (90 percent) identified as Hispanic. The median income for a family of four was \$33,486, and 78 percent of the students qualified for the federal free and reduced lunch program (McMahon 2016).

Prospective Arrupe Jesuit students undergo a rigorous application process, including an entrance exam and an interview. Students must demonstrate that they are motivated and committed to the demanding curriculum, which includes four years of English, math, science, and theology; three-and-a-half years of social studies; three years of Spanish; one year of Freshman Seminar; and one semester of art (Arrupe Jesuit High School 2016). The students must also demonstrate they are employable and willing to follow strict standards relating to professional conduct. As in all high schools, Arrupe Jesuit students have an opportunity to participate in extracurricular activities, but must plan these activities around their work schedules and lengthy commutes to and from school. Many students use public transportation from home, which adds more than an hour to their daily activities.

In addition to the intense curriculum, each student is enrolled in the school's Corporate Work Study Program, which follows a model developed by Cristo Rey Jesuit High School in Chicago in 1996. The success of the model was recognized on national television in October 2004 when *60 Minutes* correspondent Vickey Mabrey reported on Cristo Rey Jesuit High School (Mabrey 2004). The premise is quite simple: Business partners throughout the Denver metropolitan area commit to hiring a team of four students for entry-level positions and contribute a comparable market salary (less than \$27,000) to the school that is applied to overall tuition. Each student works one day a week and rotates one Monday on a four-week basis, approximately five days a month. In the Denver area, over 120 business partners sponsored a team in 2015–2016, while several sponsored multiple teams. Ten of the original fifteen sponsors in 2003 continue to this day (McMahon 2016).

Regis University placed an Arrupe team in its Copy & Print Center and its Mail Room in the inaugural year of 2003. The Regis University Library welcomed a partial team in 2004, and has sponsored at least one student each year since. Students work in the Collections and Resource Management Department and assist with processing new books, binding, shelving periodicals, and checking gifts against the online catalog. Early on, a student proficient in Spanish used this talent when a large collection of books on liberation theology in Spanish was received. The student workers are exposed to a wealth of resources, and are free to use their breaks for library research and homework assignments.

LIBRARY INSTRUCTION WITH ARRUPE JESUIT HIGH SCHOOL: THREE APPROACHES

Collaboration with the Denver Public Library (DPL)

The impetus for academic librarians at Regis University to reach out to high school students stems from the mission of Regis University, which states, “How ought we to live?” This simple question from the founding Jesuits sets the tone for outreach programs such as this one. By implementing a research day with students at Arrupe Jesuit High School or welcoming students to library instruction at the Regis University Library, librarians are not only following the institution’s credo, but they are helping to connect high school students with a general understanding of college expectations. Librarians understand how important research, evaluation of sources, and effective use of information are in the success of the academic career of students.

The Regis University Library has a long-standing tradition of providing library instruction to classes from local area high schools. Teachers from nearby high schools sought out instruction at Regis because their schools did not have libraries, they were interested in a specific college-level resource, or they wanted their students to have a college library experience. Instruction librarians led the students in searching the online catalog and introduced them to online databases. Although Regis University is a private institution, the library is a participant in the Colorado Library Card program and allows state residents to borrow books upon presentation of a state-sponsored identification card.

With a focus on service to the community and the Catholic connection, it was only natural that library instruction be provided to the students at Arrupe Jesuit High School. As a college preparatory school, Arrupe Jesuit is aware of the importance of library services to its students, but acknowledges the constraints of space and the high costs of library services and collections. The high school has no library or library personnel. Each classroom is filled with complementary books (fiction in the English classroom, nonfiction in the subject classrooms) and the school has a computer lab with Internet access. Arrupe Jesuit is approximately a five-minute walk from the Smiley branch of Denver Public Library, and less than two miles from the Regis University Library.

In 2006, the first class that entered Arrupe as freshman became seniors. Having assigned a major paper to her students, the Arrupe English composition instructor approached the Regis University Library’s Corporate Work Study Program supervisor about providing both access to the Regis Library and instruction on its use. In collaboration with the reference librarians, the Regis University librarian approached the outreach librarians at the Denver Public Library (DPL) to work collaboratively in providing library instruction

to Arrupe Jesuit's first class of seniors. Since Arrupe Jesuit is located in Denver, its students could sign up for DPL cards at the Smiley branch and gain remote access to its wealth of online databases, many geared to secondary school students. While the Arrupe Jesuit students could access Regis Library resources when physically in the library, licensing restrictions prohibited those not affiliated with Regis from accessing the resources remotely. It was important for all the students to learn how to find resources in a library, whether public or university, but also to learn how to access resources remotely, an important skill for lifelong learning. It was also important to the instructors at Arrupe Jesuit that the students work in collaboration with teachers and librarians and to physically experience the library stacks and print resources.

In preparation for the first Regis Library visit, the Arrupe seniors read the novel *Invisible Man* by Ralph Ellison, reflected on prior knowledge regarding the civil rights movement, and learned how to cite resources in the Modern Language Association (MLA) format (Lee et al. 2007, 7). With the assignment and topics from the instructor in hand, librarians from the Regis University Library and Denver Public Library prepared handouts and teaching strategies. Since this initial class was relatively small (fewer than fifty students), it was divided into two sections that switched between the instruction classroom and the reference area. Four librarians and accompanying staff from Regis University and the Denver Public Library were able to work in a group setting and individually with students. The librarians demonstrated effective searching techniques in general studies databases and the use of subject-specific print resources. Arrupe Jesuit High School and Regis Library staff coordinated the issuance of Regis University Library cards before the students arrived, allowing for an easy flow of checking out materials. The students were also encouraged to sign up for Denver Public Library cards, enabling remote access to the DPL suite of electronic resources. Free, but limited, photocopying and printing of reference materials allowed each student a takeaway for their assignment.

The Regis librarians, the DPL librarians, and the Arrupe Jesuit instructor hailed this session as an overwhelming success (Lee et al. 2007). The students had a positive library experience, worked in collaboration with teachers and librarians, and were able to write well-researched papers. There was, however, a downside to this approach. It took a great amount of lead time, was labor intensive, and required a significant amount of coordination between the libraries and between the libraries and the school. In addition, shuttling the students to the Regis campus required the use of the vans that transported the remaining Arrupe students to their Corporate Work Study Program jobs. As class sizes grew, the librarians and teachers needed a new approach.

Expanded Instruction at the Regis University Library

As word of this success spread at Arrupe Jesuit, other disciplines besides English composition requested library instruction, including the sciences and theology departments. Requests were also made from the lower grades, including the larger sophomore and junior classes. Since preparation time was shorter, DPL staff were not able to be involved and only Regis Library staff participated in the program.

With class sizes now up to nearly eighty, Regis librarians needed to devise a new rotation throughout the library. The library instruction classroom could comfortably seat about twenty students with hands-on instruction, allowing the initial class members to have individual access to a computer. This arrangement would be impossible with a class of eighty students. It was decided to highlight three areas in the rotation: the instruction classroom, the reference area, and the library stacks limited to the third floor (the circulating monograph collection and the “quiet” floor). The larger class size also involved expanding the personnel to include more librarians, more library assistants, and more instructors from Arrupe Jesuit.

Assignments were provided to the Regis librarians prior to the session, allowing them to tailor handouts and book lists. Rather than instructing the students solely on the Regis databases, emphasis was placed on instructing the students on the DPL suite of online resources, guaranteeing them access to resources available from the computer lab at Arrupe Jesuit or from home. Students were required to come prepared with a valid DPL library card number for online access. Having eighty high-energy high school students descend on an academic library that comfortably holds four hundred was pleasantly and necessarily disruptive. Students rotated through the instruction classroom, third-floor stacks, and reference area on a pre-arranged and strictly followed schedule, allowing them to research their topics, check out books, and copy pertinent pages from print reference resources or print out sections from online resources.

Although not a perfect solution, students had a college library experience and were able to write well-researched papers. Regis librarians also noticed that Arrupe Jesuit students continued conducting research in the evenings and on weekends after learning about library resources. This approach worked well for three years, but as Arrupe Jesuit class sizes continued to grow and more businesses at greater distances sponsored Corporate Work Study Program jobs, transporting the students to and from the Regis Library became unsustainable. Splitting a class over several days would wreak havoc on an already tight, four-day class schedule. Once again, a new approach was needed.

Regis Librarians Travel to Arrupe Jesuit

For the past four years, a research day has been held at the high school for several subjects, rather than at the Regis University campus, and a single academic librarian has visited the classroom on a predetermined day. Communication between library faculty and high school teachers has been key to the success of the research day visit. Just as librarians were privy to information regarding the assignment in previous iterations of research day, they received advance assignment information for on-site visits. Along with sharing information about assignment requirements, librarians at Regis suggested that students obtain a Denver Public Library card prior to the session because the librarians continue to instruct using DPL research databases. Having a valid library card gives the students ownership of the research process and ensures access outside of the classroom. Students who do not have cards are unprepared and waste valuable time sharing card numbers with others who did obtain a card. Access to these resources is critical in order to give the students a sense of the information available for research assignments.

The Regis librarians designed print handouts to leave students with a guide from the class in case a step in the research process was forgotten. This was an added cost absorbed by the academic library. In order to help ameliorate these costs, librarians created a research guide for the Arrupe Jesuit students on the Regis University Library website. Although the advantage of an online guide is that students can download a copy or read it online if they so choose, this option ultimately resulted in confusion. The added steps to get to the Denver Public Library website from the Regis Library site only confused students about where to begin their research. Removing obstacles and barriers to library research materials helps to attract students to the research process rather than discourage them early in their academic endeavors. Handouts are still made available for the students for reference after the research session is over.

The intensive one-day sessions help link students with appropriate resources while instilling the maxim that research is an iterative process. Students learn not only how to locate appropriate resources, but also how to evaluate these resources. Whether it is a current story from the newspaper, a scholarly/peer-reviewed article, or an encyclopedia entry, students are instructed to consider each source according to the scope of subject material covered and whether the information truly supports their research.

FEEDBACK FROM ARRUPPE GRADUATES AT REGIS UNIVERSITY AND REGIS FACULTY

Conversations with Regis University students who graduated from Arrupe Jesuit and other Cristo Rey schools have facilitated a better understanding of

the relationship an academic library can have with high school students who may or may not have access to a library or librarian during their high school years. Dr. Nicki Gonzales, a professor at Regis University, teaches students transitioning from Arrupe Jesuit High School to Regis University. During the summer of 2015, we were invited to speak with a group of her students to discuss their library experiences prior to coming to the university, as well as their current impression of the research process.

The Regis University students were provided with a series of questions prior to the meeting to give them an insight into the kind of information we would be seeking. In relation to general library experiences, students expressed both positive aspects of the research experience and shared how anxiety and fear can prevent them from approaching the Research Help desk. One student expressed the intimidation she feels when given a research assignment because she does not know where to begin, and noted that asking for help increases her level of anxiety. According to the students, asking for help either from the library or Writing Center would give the impression that they are less than intelligent; they do not want to appear “dumb” for not already knowing the answer. Fear of this type of stigma often surrounds those who need help, and thus are afraid to ask. This is not something limited to first-year freshman, and is no less real or debilitating whenever it surfaces. Other words students used to describe their feelings about the research process were “overwhelming,” “stressful,” and “nervous.”

This student feedback illustrated the need to keep the instruction for both high school and first-year college students who may not have a lot of experience with research. Students suggested teaching only the basics about research and how to access scholarly, academic resources for assignments. Taking a piecemeal approach may help students acclimate to the environment that they will encounter in college. Students in the focus group agreed that repetition is their friend; repeat visits to the library might help to alleviate anxiety and build a comfort level with interactions with librarians. Students indicated they remembered a Regis University librarian coming to their classroom, and appreciated the orientation to the library, but again felt the information provided was overwhelming and they could not remember how to replicate many of the searches. They did, however, appreciate the handout provided, which explained the step-by-step process for using the databases covered in their session. Other students stated that they would prefer the on-campus library orientation where they could physically handle books and check out materials for their “capstone” research assignment. Since the visit was only for one day, students did not feel there was enough time to really learn how and where to locate relevant materials for their assignments. Though they were encouraged to do so, many students who received instruction in the Regis Library were not able to return to campus due to the distances between the library and their residences. Some students did have

public library cards and used the public library databases and archives for research projects.

It is interesting to note that, when asked for a show of hands on which type of materials they prefer—print or electronic—almost all of the dozen students in the class preferred using print resources like books or articles downloaded, saved, and then printed from the computer. However, they did appreciate the convenience of having access to the resources electronically when needed.

Regis University sociology professor Dr. Eve Passerini teaches a three-week summer class to help orient students to the university. This class is offered not only to Arrupe Jesuit students, but to Denver area high school students. The course, *Sociology of Student Success*, is taught in the summer from 9:00 a.m. to 3:00 p.m., and is a three-credit class. Some of the topics covered in this class include financial aid, applying for scholarships, and writing letters of application for college. The class is offered tuition-free by Regis University. According to Dr. Passerini, students in her class who are from Arrupe Jesuit High School are often well aware of the college application process and are comfortable in the library, whereas the students not attending a college preparatory high school are more in need of this type of information. She reports that Arrupe Jesuit students are “aware of their college potential.” This is a big part of their high school education, and Arrupe Jesuit students seem well acclimated in negotiating the academic environment, with skills in debating, participating in the classroom, and using the university library (Passerini, personal communication). This type of collaboration with area high schools helps to better inform Regis University faculty and faculty librarians of students’ needs, and also helps the students to be better prepared to succeed once they arrive on campus.

CONCLUSIONS AND RECOMMENDATIONS

There is an information paradox that affects students in higher education and high schools, as well as those educators striving to create a solid foundation of research skills at all levels. Information is ubiquitous—at student researchers’ fingertips—yet not every student has the critical eye or skills to separate the noise from sound research most appropriate for his or her assignment. Students tend to pick the readily available source delivered in a search, selected by popularity and algorithms rather than by close analysis of the content.

It was evident from the experiences of Regis University librarians and from the feedback from Arrupe Jesuit students that the library instruction sessions at Regis University did make a difference, and that the students appreciated the efforts. Although there were preferences among the students

of one format over the other, they did indicate that more frequent contact with librarians that was more focused, simpler, and less overwhelming was desired. Easy-to-follow handouts were also greatly appreciated, allowing them to replicate what they did in class when conducting further research on their own.

The librarians at Regis University have made a commitment to the students at Arrupe Jesuit, not only because it allows them to embody the university mission of “How ought we to live?” but because it is simply the right thing to do. Library instruction for Arrupe students, hiring Corporate Work Study Program students to work in the library, and placing librarians on committees serving current Arrupe Jesuit students or graduates are priorities of the Regis University Library administration. To this end, the library will:

- Continue to reach out and offer library instruction to Arrupe Jesuit High School students at either Arrupe Jesuit or the Regis University Library, or in a combination of settings.
- Continue to improve instruction through better teaching methods (handouts, clickers, online tutorials).
- Consider placing a Regis University librarian on-site at Arrupe Jesuit High School on a mutually agreed upon schedule for a few hours each week.
- Consider having an Arrupe Jesuit graduate in the Regis University Service Learning program join the Regis librarian during these rotations.
- Appoint a Regis University librarian to join the summer institutes and other advisory committees that serve these populations.
- Continue to place a Corporate Work Study Program student in a position in the Regis University Library.

This ongoing relationship between Arrupe Jesuit and the Regis University Library can be a model of how a local university or college can make a significant difference in students’ lives by reaching out to high schools and aiding in students’ transition to college. This collaborative model between academic libraries and high schools is a unique opportunity for outreach with measurable outcomes and successes. This is just one example, along with other cited outreach programs, that libraries can adopt, tweak, and formulate for their own learning communities, in order to provide these types of information literacy instruction sessions.

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Part IV

**Broadening Library
Outreach Audiences**

Chapter Ten

“Books Are Not Enough”

Engaging with Polytechnic Students

Sabrina Wong

While student engagement and outreach are not new to academic libraries, most published research has tended to focus on activities at large, four-year research institutions. Drawing on my experiences in a newly created student engagement librarian position and previous outreach experience in a research university setting, this chapter will focus on the Canadian polytechnic context and nontraditional students, and includes development of a student engagement plan that best meets the needs of this student population. The title of this chapter, “Books Are Not Enough,” comes from a student library survey response and highlights a common sentiment expressed at polytechnics: book learning is less important than applied learning. Often posed in contrast to universities, polytechnic institutions focus on practical, hands-on skill development and applied research (Polytechnics Canada 2015). Since libraries can be perceived by this population merely as book warehouses, they are not always considered active partners in student learning. However, successful student engagement planning and assessment can shift student and institutional perceptions of the library’s role in polytechnic education.

With shrinking budgets and increasing pressure from administrators to provide more services with less staff, librarians often try to show the library’s value by providing *every* service for *every* student, but that is neither sustainable nor strategic. In creating an engagement plan for a polytechnic institution, librarians need to creatively expand services to meet nontraditional needs while still maintaining core library values and staying within the scope of library services. Polytechnic librarians need to consider how formats and modes of outreach typically used at four-year institutions might fit at a polytechnic. Rather than a standard four-year timeline to foster connections be-

tween the library and a student, polytechnic students attend programs that vary between eight weeks and four years in length. A student engagement plan needs to respond to this compressed timeline while also addressing a trade school culture that values practicality, applied education, and workplace readiness. This plan should extend beyond the walls of the library, as collaboration and coordination with other campus units both raises the profile of the library on campus and results in better services for students. This chapter will provide a case study example of the development and assessment of a student engagement plan at Southern Alberta Institute of Technology (SAIT) to demonstrate how libraries with similar populations can best meet student needs.

LITERATURE REVIEW

Student Engagement

Research on student engagement in community college and university libraries will be used to frame this discussion, since very little has been published on polytechnic libraries. In defining student engagement at a library, it is useful to first examine its definitions in the broader campus context. Librarians, as partners in student engagement, should be familiar with the ways in which our nonlibrarian colleagues talk about student engagement. There is no real consensus among scholars on how student engagement is defined in higher education. Ella Kahu (2013, 758) provides an overview and critique of four theoretical approaches to student engagement: behavioral, psychological, sociocultural, and holistic. Each of these perspectives provides insight, but is insufficient when used individually to examine engagement (Kahu, 2013, 768). Rather, student engagement should be seen as “a psychosocial process, influenced by institutional and personal factors, and embedded within a wider social context” (Kahu 2013, 768). This multifaceted, networked approach to student engagement makes space for a deeper discussion of how students feel, act, and change during their educational journeys.

The terms outreach and student engagement are often used interchangeably when talking about this type of work in libraries: outreach can be defined as “reaching out to nontraditional library users, extending ‘beyond borders’ of a physical library, and promoting underutilized or new resources,” but it may also “include any initiative that reaches an audience that otherwise may not have been exposed to library resources or services” (Dennis 2012, 369). This chapter proposes that student engagement be thought of as a framework for outreach activities, as limiting ideas only to outreach results in librarians not seeing the holistic needs of students. As an action-based concept, the term outreach inherently places the librarian as the outreach-er at the center, rather than the user as the subject of the outreaching. It

ignores a student's agency in his own engagement: outreach is a one-way relationship, in contrast with Kahu's (2013, 767) conceptual understanding of student engagement as bidirectional. Kahu (2013, 758) also identifies the "lack of distinction between the state of engagement, its antecedents and its consequences" as an additional problem in the current discourse on student engagement; that is, when researchers write about student engagement, it is unclear whether they are discussing the act of being engaged, what happens to facilitate this state of engagement, or what happens after students have been engaged. She explains that "what is considered to be the process is not engagement, instead it is a cluster of factors that influence student engagement . . . whereas the outcome *is* student engagement" (Kahu 2013, 764). To provide greater clarity between these elements, Kahu (2013, 766) proposes a framework with six components: two antecedents (structural and psychosocial influences), the state of engagement, and two consequences (proximal and distal), all surrounded by the sociocultural context.

Loanne Snavely takes a different approach when examining student engagement in the library. She presents a four-tiered model that places student engagement in the "information literacy continuum": for her first tier, the initial engagement phase, the goal is to "introduce the concept of libraries to incoming students who may have had little exposure to libraries . . . and to bridge the gap between high school and college library experiences," while tiers two through four focus on developing information literacy skills and are split into first, upper, and graduate levels (Snavely 2012, 2). Snavely's approach, while useful for locating student engagement within information literacy, conflates student engagement activities with course-based instruction and limits student engagement to orientation activities. This discussion is not to devalue the range of literature on academic library outreach initiatives, but to encourage librarians to view these activities and initiatives as part of a broader student engagement program that factors in the complexity of the student experience. From the perspective of a librarian, library student engagement may be thought of as strategic and purposeful relationship building with populations of previously non- or under-engaged students, and distinct from course-based instruction, reference, or circulation interactions.

However, student engagement is not only about building rapport with students. It also involves building relationships with the support service providers, faculty, and administrators who interact with these students. Emily Love (2007, 15–16) provides a useful partnership model that can be applied to this relationship development. The librarian should start with an understanding of the library's goals and the potential partner's goals so that she can identify synergies (Love 2007, 15). In making the first connection, the library and the partner should embark on some smaller projects before launching a larger-scale project (Love 2007, 16). Partnership work involves setting clear expectations about what the partnership entails, creating formal

documentation, and setting up strategies for promotion and assessment of activities (Love 2007, 16–17). It is important to keep in mind the big picture: even when a collaborative program goes poorly or has little or no student attendance, the partnership is not necessarily a loss because the partners may gain new awareness of library services and the potential role that the library can play in future endeavors. While this chapter frames student engagement as an active relationship among the library, campus partners, and students, any student engagement plan must begin with a nuanced examination of students and the factors that influence their lives.

APPRENTICES AS “NONTRADITIONAL” STUDENTS

Recognizing that the polytechnic draws a more diverse group than traditional four-year institutions, the polytechnic librarian needs to identify the different student populations. There is limited research on polytechnic students; however, some findings from research on nontraditional students in community colleges and universities can be applied to polytechnics. Although the term “nontraditional” is widely used, Silvia Gilardi and Chiara Guglielmetti (2011, 33) and Karen A. Kim (2002, 74) identify a problem in the lack of a common definition, which leads to the term’s inconsistent application: “using the single term *nontraditional* to refer to these varied populations of students makes it difficult to understand which students are being discussed and which of their many characteristics are being emphasized” (Kim 2002, 85). Age, delayed entry into studies, taking part-time studies, and having dependents are some of the criteria often used to define nontraditional students (Kim 2002, 75–78). As many polytechnic students fit one or more of these characteristics, it might seem that nontraditional is an appropriate term to use when discussing polytechnic students. However, in addition to being vague, “nontraditional” treats these students as the “other” (Kahu 2013, 763), and also promotes negative stereotypes (Kim 2002, 86). Using any other term would run into the same issue of clumping together heterogeneous groups of students. To provide support for a variety of nontraditional students, polytechnic librarians must first gain an understanding of the various student demographic groups that may be considered nontraditional, taking a lead from Kim’s (2002, 85–86) recommendation that research should be conducted on specific subpopulations of nontraditional learners.

Apprentices are one common subpopulation of nontraditional students at polytechnics. To become a registered apprentice in Canada and qualify for training, a prospective apprentice must first find an employer willing to take them on as an apprentice (CAF-FCA 2016a). Since apprentices are employed, there is incentive and pressure to pass the yearly provincial exams that lead to their journeyperson certification. The majority of their training,

roughly 80 percent, is spent in the workplace supervised by a journeyperson, with only 20 percent taking place in the classroom (CAF-FCA 2016a). While apprenticeship programs can be up to four years in length, apprentices may only be in classes on campus for six to eight weeks per year. During their time on campus, apprentices have very full and structured timetables that limit their participation in extracurricular activities. Although some apprentices may stay in residence during their short weeks on campus each year, they may not feel fully integrated into a semester or academic year-based campus life calendar. Barbara Jacoby (2014, 294) found that commuter students experience feelings of exclusion from campus life, and it is likely that apprentices feel the same disconnect due to the limited time they spend on campus. Apprentices may also experience some dissonance with their categorization as students when they may think of their other roles in life (apprentice, mother, daughter, friend, sister, etc.) as more important in how they see themselves. Like commuter and part-time students, apprentices often have other roles to play in their daily lives (Jacoby 2014, 292). Kahu (2013, 767) refers to this "lifeload" as a key factor impacting student engagement.

Having multiple life roles is a characteristic shared by adult learners, who are also often cast into the category of nontraditional students. Linda Hagedorn (2014, 308–9) proposes that, unlike traditional students who define themselves as "students first and foremost," "while college is important to adult students it doesn't fully define them." For nontraditional students, the challenge "lies not in developing their own social identity in the new learning environment, but in striking a balance between their academic and external commitments" (Gilardi and Guglielmetti 2011, 36). Adult learners may experience a sense of cultural difference when entering a post-secondary environment (Kahu 2013, 763). Librarians should recognize that these students are "going through a period of transition, not only professionally but personally, which frames the context of their academic experience, requiring the activation of appropriate coping strategies" (Gilardi and Guglielmetti 2011, 45). Since apprentices transition back and forth between on-the-job and classroom learning environments, these feelings of foreignness may be more profound than for other polytechnic students, and it may be difficult to establish a sense of belonging on campus.

Apprentices in particular must also deal with others' preconceived notions of who they are and what they can do. While stereotypes persist, polytechnic librarians should recognize that apprentices come from all walks of life. Research conducted by the Canadian Apprenticeship Forum (CAF-FCA 2014, 9) indicates a wide age distribution of registered apprentices in 2011, and while a significant percentage (29 percent) are twenty to twenty-four years of age, 17 percent of apprentices are forty and over. Unfortunately, data on Aboriginal apprentices is not available, but this population is clearly of interest to the CAF-FCA because it has created reports for employers on how

to hire and retain Aboriginal apprentices. The CAF-FCA (2016b, 4–5) also reports that in 2012, women accounted for 14.2 percent of all registered apprentices in the trades across Canada, and in Alberta, 9 percent of registered apprentices. While this number is low, female apprentices should not be ignored: these women encounter social, cultural, and institutional barriers in pursuing their education and work. This data shows that even a subpopulation of students can have diverse traits, and this diversity should be kept in mind when planning programs.

With this general understanding of apprentices, the polytechnic librarian should then consider what this means in the specific context of the institution. An institution's culture determines how it engages with students and how students respond. Students who choose polytechnics may have certain ideas about what constitutes a polytechnic education and what role the institution should play in their educational paths.

SAIT AND CANADIAN POLYTECHNICS

In Canada, polytechnics are publicly funded post-secondary institutions that can offer four-year bachelor's degrees, diplomas, certificates, and apprentice training programs (Polytechnics Canada 2015). It should be noted that in Canada, private and public colleges offer trades training, and polytechnic universities offer undergraduate and graduate programs, but this discussion will focus on public institutions that define themselves as polytechnics distinct from colleges (two-year institutions) and universities. The Polytechnics Canada Association represents eleven polytechnics in Canada; however, since higher education is governed at a provincial level, it should be noted that these member institutions are geographically distinct and fall into a number of different provinces: six are located in Ontario, two in Alberta, and one each in British Columbia, Saskatchewan, and Manitoba. The two polytechnics in Alberta, Southern Alberta Institute of Technology (SAIT) and Northern Alberta Institute of Technology (NAIT), operate independently in the province's two major cities, Calgary and Edmonton, respectively. These two polytechnics are part of the twenty-six publicly funded postsecondary institutions in Alberta, which range from large research universities to small faith-based schools. A 2007 report, *Roles and Mandates Policy Framework for Alberta's Publicly Funded Advanced Education System*, outlines a six-sector model for post-secondary education; in this framework, "polytechnical institutes" are given the mandate to "provide apprenticeship, certificate, and diploma programs geared predominantly to technical careers, and some applied and baccalaureate degrees in specified areas" (Alberta Advanced Education 2007, 9). This mandate shapes program offerings and student demographics as well as organizational culture and identity.

SAIT began as the Provincial Institute of Technology and Art in 1916 with eleven students in motor mechanics and metalworking programs, and grew rapidly as soldiers returning home from the First World War required retraining (SAIT 2016a, 4). Nearly one hundred years later, by 2014–2015, the institution has grown to 50,814 students in eighty-three full-time and thirty-five apprenticeship programs (SAIT 2016a, 22–24). Of those students, only 15,765 were full load equivalent (FLE) students; the majority of students (35,049) take part-time programs (SAIT 2016a, 24). The largest group of students is apprentices, with 8,777 students in programs ranging from cook to electrician to millwright (SAIT 2016a, 22, 89). All of these students are served by the SAIT Library, which is run by a library manager, five librarians, and twelve library technicians in a two-level space on the main Calgary campus.

While SAIT's programs have diversified since its early years, the institutional history has created a foundational identity as a trade school, and this mentality still plays a key role in how SAIT's students, staff, faculty, and community see themselves. Practicality, applied education, industry responsiveness, and workplace readiness are key traits of the SAIT identity. At the same time, there is tension between wanting to move beyond being seen as a trade school while also recognizing the key role of the trades in the institution. SAIT positions itself as "an innovative and entrepreneurial post-secondary institution, distinct from universities and colleges in that it offers a skill-focused approach to learning" (SAIT 2016c, para. 2). The polytechnic's applied approach to learning is often posed in contrast with the theory-based approach of universities and colleges. A librarian must take into account a polytechnic's distinct culture rather than using a one-size-fits-all approach for student engagement.

STUDENT ENGAGEMENT AT SAIT LIBRARY

A student engagement plan should provide a framework for all student engagement and outreach activities: all activities should contribute to overarching student engagement goals, be timely and responsive to student needs, and fit in with wider campus initiatives. However, the plan is merely a product of a larger, strategic project of building relationships with the campus community. This section is organized into four steps (identifying gaps and gathering evidence, setting up a student engagement mind-set, mapping a cohesive engagement plan, and assessing the plan), and broadly follows the actions that I took to establish student engagement as a key focus at SAIT Library. While the steps are presented in this order, many of these tasks are concurrent and iterative: I often identified gaps and revised the plan during ongoing assessment of events. The engagement plan should be a living document that

is reviewed and revised on an annual basis, if not more frequently, as student and institutional changes arise. George D. Kuh and Robert M. Gonyea's (2015, 359) research question, "What does the library contribute to student learning, broadly defined?" may be adapted for the polytechnic to help guide the process of creating a student engagement plan. For example, at SAIT, the library must ask itself how a welding apprentice might see value in the library when her information needs are satisfied by her course materials and her hands-on work requires a shop space. What, if anything, can the library add to her education?

Step 1: Identifying Gaps and Gathering Evidence

The position of student engagement librarian was new to the SAIT Library in 2015, so I began by identifying gaps and gathering evidence to lay a solid foundation for a student engagement plan. In conducting this review, I heeded Ernest Pascarella's (2006, 513) warning about rational myths: "if a policy or program is rational and sounds like it should be beneficial, we assume that it is—even if there is no corroborating evidence," resulting in "an extensive edifice of assumptions and beliefs about what constitutes a quality . . . education that has little or no empirical support." Librarians often make assumptions about what students value, need, and want, without asking students. At some time or another, most libraries have hosted programs that seem logical and intuitive, but have failed to investigate whether the program was in fact effective. This is not an issue specific to libraries; it is a problem throughout higher education where "the vast majority of programs and policies are essentially unexamined and continue to exist in the absence of evidence supporting their net worth" (Pascarella 2006, 513). Frequent reviews and ongoing assessment should be conducted to inform improvements and challenge assumptions.

I drew on data from a research study and annual institutional surveys to develop a picture of the SAIT student body and their uses of the library. During the 2009–2010 academic year, Francine May and Alice Swabey (2015) conducted an observational study of five small to medium academic libraries in Alberta, including SAIT. Although several years have elapsed since their study, their work nevertheless provides data on how students use the library. May and Swabey (2015, 785–76) noted that group study was a popular activity at SAIT Library despite its low number of group study rooms in comparison to its peer institutions. This finding supported my own observation that students tended to work and move around campus in groups. However, it was not within the scope of May and Swabey's study to differentiate between subpopulations of students. Drawing on more recent data about the student body's different subpopulations, I examined SAIT's two annual surveys of its graduating students: the Graduating Apprentice Satisfaction

Survey (GRAS) and the Learner Exit Survey (LES). The GRAS is administered to all graduating apprentices, while the LES is administered to students completing non-apprentice programs such as diplomas, certificates, and degrees. These results are useful in developing a student engagement plan because data is provided on two distinct groups of students. In a question about satisfaction with the library on the 2014–2015 GRAS, 74 percent of students who answered the question indicated excellent and good levels of satisfaction with the library. However, 47 percent of all survey respondents did not indicate a satisfaction level, instead responding that the library as a service is “not applicable” to them. This accounts for 893 of the 2,100 graduating apprentices in 2014–2015. These responses show that, while apprentices who recognize the library is relevant to them are satisfied with the library, almost half of graduating apprentices do not consider the library as relevant.

In contrast, in the 2014–2015 LES, only 21 percent of all survey respondents answered the library satisfaction question with “not applicable.” The proportion of “not applicable” responses from the graduating apprentices (47 percent [n=893] in 2014–2015) is so significantly different from the general graduating student population (21 percent [n=1,050] in 2014–2015) that this identifies a major opportunity for the library to increase outreach and awareness activities for this group. It is important to acknowledge that this gap is not a stand-alone phenomenon, but a consistent pattern over several years. The percentage of graduating apprentices who responded to the library satisfaction question with “not applicable” has been consistently high for the past few GRAS: 49 percent in 2012–2013 and 42 percent in 2013–2014. The LES for the same years have a much lower number of “not applicable” responses from non-apprenticeship graduating students (16 percent in 2012–2013 and 14 percent in 2013–2014). While it is tempting to hone in on the 74 percent of GRAS respondents who answered the library satisfaction question with “excellent” and “good,” it is more useful to consider the 47 percent of all survey respondents who did not indicate a satisfaction level (“not applicable”). Is the library “not applicable” because these apprentices are not aware of library services and resources that support their needs, or have these apprentices used the library and discovered that its services do not actually address their needs?

To answer this question, I not only made use of existing evidence, but also sought out faculty and student groups for more information. At SAIT, the academic chairs of apprenticeship programs meet regularly to share new developments in their units and discuss issues that impact apprentices. Reaching out to this group and offering to give a short presentation allowed me to not only promote existing activities, but also learn about what administrators have identified as student needs and identify new opportunities for collaboration. A face-to-face meeting allowed the library to come to the table

as an equal partner and provided an opportunity for academic chairs to advocate for greater use of library services to their peers. One academic chair spoke with enthusiasm about the test bank database made available to his students through the library, and another identified specific library staff members who had been helpful to him. This peer-to-peer promotion at the administrator level can increase awareness and use of library resources. While these academic chairs may have little day-to-day interaction with students, they play a key role in providing direction to their instructors, who have direct influence on student behavior.

In conjunction with administrator relationship building, I also made sure to reach out to more mixed participant groups with support service providers, administrators, instructors, and students. For instance, the Women in Trades and Technology (WITT) and similar groups have a presence on many polytechnic campuses. These groups provide a safe forum for discussing issues that impact women working in traditionally male-dominated fields, and they are often seeking to promote awareness of the systemic inequalities that exist in these fields. By working in collaboration with these groups, the librarian not only has the opportunity to provide program and curriculum support, but also to contribute to a welcoming campus environment. The information gained from these groups was invaluable in providing direction for library student engagement initiatives.

Step 2: Setting Up a Student Engagement Mind-set

Informed by this review of survey data and conversations with the campus community, the next step was to consider how to frame the plan so that it fits with campus-wide priorities as well as library-specific ones, advocates for support internally and externally, and takes into account campus growth and change.

At SAIT, the current strategic plan addresses five priorities: sustainable growth, student success, employee success, applied education innovation, and partnerships (SAIT 2016d, 25). Most of these themes are fairly common in post-secondary institutions; however, each institution's specific context and organizational culture influences how these priorities are solidified and carried out. Since polytechnics appeal to students who want to enter a skilled workforce very quickly after completing a program, one of SAIT's key graduate measures is employment rates (SAIT 2016d, 20–21). The library's student engagement plan needed to use the same language as the institutional plan to show the library's contributions in measurable ways. While the library may not be able to show direct causal relationships with outcomes, it can nevertheless participate in supporting goals since "what is most important to college impact is the nature and breadth of a student's experiences over an extended period" (Kuh and Gonyea 2015, 373). The SAIT Library's

student engagement plan primarily addresses goals in the student success priority area; however, gains in one priority area will positively impact other priority areas.

While using the same language as the institutional plans laid a good foundation for the engagement plan's success, the outcome ultimately relied on individuals putting the plan into action. Library staff needed to engage in critical reflection to overcome any stereotypical or prejudicial notions of their users and needs: framing nontraditional students, such as apprentices, as "non-users" puts the blame on apprentices for failing to use resources, when it is in fact the institution's responsibility to provide student supports and promote their usage (Jacoby 2014, 295). Student engagement and success is the responsibility of all employees at all levels and in all units. The Lamb Learner Success Centre at SAIT provides a suite of programs that support apprentice success, including one-on-one academic coaching and PREP 145, a short, optional course for apprentices prior to starting their program that helps with skills, such as time management and test taking, that directly benefit their academic success (SAIT 2016b). While it may be easy to assume that this support niche is satisfied by this service unit's programs, I considered what could be done to provide further institutional support for apprentices. Rather than framing it as a competition for student time and attention, I sought to provide activities or programs that could enhance or complement existing support services. It is misleading to think of student engagement in silos, as defined by different operational groups such as the library and the Success Centre, as each group is merely one component of a student's whole campus experience. Gilardi and Guglielmetti (2011, 48) emphasize that "for nontraditional students, the fundamental variables in sustaining and continuation of studies are a greater use of learning support services and higher levels of perceived social integration." In exploring the partnership between libraries and minority student services, Love (2007, 14) points out that while stand-alone interventions are not enough to improve retention rates, these individual activities can work to take down social, institutional, and psychological barriers to college completion. The library works with a variety of units to provide seamless support for students that makes use of each unit's strengths and capacities. Engaging with all of these stakeholders allows the library to be embedded as a partner, not just a support, in these programs.

Librarians working in smaller libraries often juggle multiple responsibilities and roles, and so it can be difficult to find the time and effort for relationship building. I am also the liaison librarian for the School of Health and Public Safety, in addition to my student engagement responsibilities. Therefore, it was essential that I identify library staff members who could help with outreach and relationship building. Coleen Meyers-Martin and Laurie Borchard (2015, 523) note that librarian roles and responsibilities will

have to shift in order to adapt to the re-imagining of the library as a space that meets both academic and social needs. Library administration is key in leading this change: the SAIT Library Manager fosters a culture of student engagement among library staff. This leadership support allowed me to enlist library staff who have existing relationships with individuals or groups to help with advocacy and promotion work. By drawing in extra staff help, I could better focus on the big-picture view and address gaps in relationship building. An additional benefit to sharing the workload of relationship building is that it is better for the library, as a whole unit, to be seen as interested and invested in student engagement rather than for a single librarian to act independently. Within the library, sharing student engagement tasks also facilitated staff engagement and ownership of library initiatives and goals. The distinction made by Kahu (2013, 764) between “a cluster of factors that influence student engagement” and the actual outcome of student engagement is useful in helping library staff to conceptualize student engagement in the library; rather than defining student engagement as the effort put into planning and offering programs, this effort should be better considered as setting up the optimal conditions for engagement to happen. In looking at outcomes rather than efforts, the engagement framework is also repositioned with the student, rather than the institution, at the center. This outcome-focused view better fits the need of telling the story of student engagement in the library to others on campus, and communicating the library’s contributions to institutional priorities.

Finally, when setting up a student engagement mind-set, library staff need to recognize that overall services may also need to change. Sukovic, Litting, and England (2011, 71) note that while library spaces have changed to meet new needs, core library services have not made the same shift. Snavelly (2012, 5) suggests that students prioritize access to space over programs and recommends that libraries only staff for “most essential and basic services.” However, this can prove to be a slippery slope for libraries: if the library’s value consists of its share of campus real estate, what will happen to the library’s value when new and appealing nonlibrary student spaces open on campus? At SAIT, this is a real and pressing concern; a new student union building was recently approved. When this new building opens in a few years, it will have study spaces and work rooms with the latest technology. In that time, the library needs to distinguish itself through means other than access to space. A robust and relevant student engagement plan will need to be in place and supported by the library’s campus partners.

Step 3: Mapping a Cohesive Engagement Plan

One of SAIT Library’s goals is to build a sense of belonging and contribute to a vibrant campus life experience. For Deborah Harrop and Bea Turpin

(2013, 68), community in libraries "is about social interactions, support, and a sense of common purpose." This goal cannot be achieved through a single activity, so this section will describe a variety of activities that all build community while also addressing specific, identified needs. The section divides events into four main groupings (initial engagement, term events, weekly events, and pilot events) and provides examples for each grouping.

In designing programs, polytechnic librarians should recognize that what might work for a respiratory therapy assistant student may not work for a carpentry apprentice, and what might work for one carpentry apprentice may not work for another. Activities need to take into account different learning styles, program requirements, and a diverse student body. However, that is not to say that certain activities can only work for a specific audience; activities can also draw unexpected audiences and have unexpected impacts. Pascarella (2006, 512) notes that "the same intervention or experience might not have the same impact for all students, but rather might differ in the magnitude or even the direction of its impact for students with different characteristics or traits." Kahu's (2013, 767) concept of lifeload as a key factor in student engagement, described earlier in this chapter, is useful in thinking about whether an activity may attract student participants. With respect to the students' lifeloads, events should be offered on a varied schedule that maximizes opportunities for students to participate (Jacoby 2014, 302). This can be difficult to achieve with a small staff, but I sought input from students and other stakeholders about optimal timing during the term. While some activities can correspond to a September-to-May schedule, other activities need to be offered more frequently and throughout the year. Apprenticeship programs have exams that are administered province-wide on specific dates, while other programs have exams and assignments on a varied, course-based schedule. This means that, unlike institutions without trades programs, library use does not spike only at midterm and final exam times and different students may require interventions at different times. Timing during the day was also important to consider: unlike students at a four-year institution, who may have large breaks between classes and a course load with gaps that permit extracurricular activities, many SAIT full-time students have more tightly scheduled programs. Timing is an essential component for success, not only in terms of event attendance, but also because it demonstrates to students that the library takes into account their schedules and respects their time.

Initial Engagement

Orientation was an important first step to building a student engagement plan. In Snavelly's (2012, 2) four-tiered framework for student engagement, the first tier is the initial engagement phase, with the goal of "introduc[ing]

the concept of libraries to incoming students who may have had little exposure to libraries.” While Snavelly’s second through fourth tiers are not relevant to this discussion, this framework is still useful for placing initial engagement, often viewed as an extraneous to educational goals, within a continuum of information literacy development. The initial engagement phase is essential for polytechnic libraries because students may have poor past library experiences and lack understanding of what the library can contribute to their studies and future success. Moreover, polytechnic students may not have the same opportunities for serendipitous, point-of-need support as their peers in four-year institutions because polytechnic programs are often shorter in duration. Although library orientations might be out of vogue at some institutions (Snavelly 2012, 3), they still are important points of entry for the SAIT Library. During the 2015–2016 academic year, the SAIT Library offered thirty-one program-specific library orientation tours for a total of 1,067 students. The majority of these tours took place during fall orientation; however, for groups with different start dates, like apprentices, the library also offered tours throughout the year. Unlike orientation events for traditional students, which are often framed as parties and scavenger hunts (Snavelly 2012, 3), SAIT orientations are framed in a more professional context in response to its nontraditional student base. Attending an orientation to ensure future success in a program seems a better use of time for these students than attending a library party. It is demeaning for adult learners to be treated like teens who require a great deal of hand-holding when they are in fact capable and competent adults. I found that participating in program-specific orientations and student success workshops were successful ways to engage with students, particularly when the initial engagement acknowledges and respects the prior experiences and learning that the students bring to the institution.

During this initial engagement phase, while activities can be fun and enjoyable, they should also be purposeful and tailored to program needs. Teaching faculty can play a big role in building support for library use during these orientations. At SAIT, instructors are hired from industry: they enhance classroom teaching with their practical expertise and ability to speak to real-world experiences. When an instructor emphasizes particular skills or knowledge as important, students will respect their recommendations because they are made based on lived experience in the field. During this initial contact, it is key to have instructors advocate for the relevance and importance of library services to their students because research shows that the classroom is the most important learning space for adult learners (Gilardi and Guglielmetti 2011, 35), and experiences outside of the classroom may be of lower priority for adult learners due to the many competing demands on their time (Jacobs and Hundley 2010, 9). I used initial engagement events to draw a connection

between the library and student success, encouraging students to expect the library to be an active participant in their education.

Term Events: De-Stress Fest

With student needs in mind, the SAIT Library offers midterm and final exam preparation events for all polytechnic students in partnership with Student Development and Counselling, Lamb Learner Success Centre, and the SAIT Students' Association (SAITSA). Term-end activities are common at many post-secondary institutions. Meyers-Martin and Borchard (2015, 510–11) conducted a survey of library activities during exams week and noted that libraries may offer a range of programs that enhance social interaction through games and provide creative outlets and a relaxing environment. The SAIT Library has hosted weeklong end-of-term events (De-Stress Fest) over the past few years. These partnership events began with the intent of showing students that SAIT cares about their well-being and academic success, and has grown to provide students with the skills to support those goals.

I had helped to establish term-end library events in my previous role at a university, so when I began at SAIT, I approached units about a potential partnership. I recognized that these different partners could each contribute unique knowledge about students and provide mechanisms for supporting their needs. Student Development and Counselling could support students' end-of-term mental and emotional loads; the Lamb Learner Success Centre could share strategies for exam preparation and scheduling time; and SAITSA could provide a student perspective. The library was a natural host and coordinator for these activities for two reasons: students were already using it as study space, and frontline library staff had identified student needs in the library that were beyond the library's service scope. During the first De-Stress Fest, the scope was limited to serving tea and treats and providing handouts with study tips and stress-relief techniques. These stations were available from 6:00 p.m. to 8:00 p.m., but due to the commuter-campus nature of SAIT, participant numbers sharply declined after 7:00 p.m. The decision was made to condense future evening activities to the 5:00–6:30 p.m. time slot when the library experiences the greatest turnover, catching students arriving after their daytime classes and evening students before their classes begin. Child care, road congestion, and frequency of transit options are some factors that affect SAIT student ability and willingness to participate in extracurricular activities.

To increase opportunities to participate, drop-in lunchtime workshops were added so that students could take part while they are already on campus. These fifteen-minute sessions cover point-of-need skills such as creating a weeklong study schedule, taking multiple-choice exams, and working effectively on a group assignment. The short and informal nature of these work-

shops allowed an academic coach to work with several students in the time of a regular one-on-one appointment. These students come away from the sessions with practical tips, actionable items, and personalized study plans. While this public workshop format worked for the Lamb Learner Success Centre partners, it was not an effective model for all services. Student Development and Counselling partners decided that it would be best to continue providing handouts and podcasts so as to maintain a professional distance and avoid making students who already use their services feel uncomfortable about public encounters with their counselors. Takeaways, like small-format handouts and business cards, could be discreetly slipped into a pocket while grabbing a cup of tea or a snack.

In addition to adjusting event timing, the slate of event activities was expanded to also include mini-activities that address academic and mental wellness needs during this stressful period. Other De-Stress Fest partners, while contributing to the library's events, also hosted events in their own spaces, such as puppy rooms, drum circles, massages, yoga, and counseling drop-in sessions. These individual activities were originally promoted on separate posters; however, to streamline promotion, the schedule of events is now put together on one poster under the De-Stress Fest brand, which allows a consistent message to be pushed out through all partners' marketing channels. A calendar view allows students to see all of their options and plan their time accordingly. Partner debriefs after the event play an important role in improving the programming. During one of these debriefs, academic coaches and educational counselors suggested that the week before final exams was too late to develop lasting study habits and recommended that time would be better spent dealing with just-in-time needs. In response to this feedback, a midterm exam event was created to support the learning of study habits and skills that students could practice through the midterm week and rest of term. It should be noted that the timing of these events also fits well with the six- to eight-week cycles that apprentices spend on campus.

Campus partners shared the common goal of supporting students; however, each partner also made gains on their individual unit goals by participating in the De-Stress Fest. The campus partners promoted awareness and use of their services, which are located in less visible places on campus, and SAITSA met its mandate of responding to constituents. These events helped to associate library space with a range of supports for students' various academic and nonacademic needs. While this outreach activity may engage students with immediate enticements like free tea and study tips, the longer-term gain toward student engagement is the students recognizing the library's role in supporting their work and returning to the library's physical and digital spaces in the future.

Weekly Events: Conversation Club

Other events may need to be offered multiple times per term in order to reach the targeted audiences. Weekly or bi-weekly programs allow students to build community through frequent and sustained contact. The SAIT Library runs Conversation Club for English as an Additional Language (EAL) learners. Conversation Club is a programming idea borrowed from public libraries: multiweek, one-hour sessions allow groups of EAL learners to practice speaking English in a safe, low-risk environment and build confidence. Two library technicians facilitate these sessions, encouraging the students to lead the conversation. In support of the outcomes of SAIT's English Language Foundations (ELF) program, the focus of Conversation Club is on every day and workplace communication rather than academic communication. Since the target audience is ELF students, sessions are scheduled to accommodate program dates and times. Originally, sessions were only offered once a week, but in response to feedback from participants and program instructors, the hour-long program is now offered twice a week for the first six weeks of each eight-week program session during peak intake times. Two different program times, one at lunch hour and one in the early evening, allow students in both morning and afternoon cohorts to participate.

In the most recent round of sessions, participating students asked to learn more about Canada and its indigenous peoples. Through the library's connection with SAIT's Chinook Lodge, the library was able to invite two Métis student volunteers to participate in a session. During this session, gains were made on SAIT's institutional priorities of student and employee success: the employee facilitators felt engaged with their work, and the students gained valuable soft skills for the Canadian workplace. The EAL students learned how to articulate complex questions about culturally sensitive topics, and the Métis student volunteers practiced adjusting their speaking speed and vocabulary to communicate effectively with EAL speakers, a valuable skill for these future paramedics.

While some students will enroll in only one eight-week term, many students will spend multiple terms at SAIT, and by offering this program consistently and promoting it with the start of each eight-week term, these students hear the message to participate multiple times throughout their enrollment at SAIT. In addition to strategic timing, students should also "be intentionally and explicitly invited to engage. . . . Merely stating 'all are welcome' is not enough" (Jacoby 2014, 301). This invitation can take many forms depending on the population that is targeted. Students in the ELF program come to the library during their orientation sessions and are welcomed by the two library technicians who lead Conversation Club in the same room where the program is held. These library technicians then give ELF students a tour. To facilitate understanding, simple English is used and handouts with session

dates are given out to the students. Prior to the start of each intake session, posters are hung in key areas: the hallways outside of ELF classrooms, International Student Advising Office, residences, program workspaces, as well as popular thoroughfares and microwave spaces. Posters may not be the most innovative marketing technique, but they are an effective way to promote activities at SAIT. While advance notice is important to students (Jacobson 2014, 302), it is equally as important for the faculty and frontline staff who encourage students to take part in campus life. I work closely with communications and marketing staff at the institutional and departmental levels to ensure that these partners are kept informed and engaged. Library staff are educated about program dates and staff contacts, and the information desk is stocked with handouts for impromptu, point-of-need promotion.

Pilot Events: Human Library and Speed Networking

One-time pilot events are helpful in creating campus connections and testing ideas; however, it can be difficult to get funding to test out new programs when library budgets are strained. Drawing on institutional special projects funds and sharing the costs and workload with campus partners are two ways the library has been able to implement new events. I successfully applied for campus hundredth-anniversary funding for the SAIT Library to host its first Human Library by emphasizing the event's potential to bring together diverse members of the SAIT community.

At a Human Library, human "books" tell their stories to "readers." The sessions were set up as small groups rather than one-on-one, and were kept to forty-five minutes to allow more people to participate. Although readers were encouraged to pre-register, curious passers-by were invited to participate. Given that SAIT is a commuter campus, this evening event was expected to draw only a small audience, but twenty-nine students, faculty, staff, administrators, alumni, and members of the community came to listen and learn from the nine human books. For human books, the event offered an opportunity to share their stories of hope, and for the readers, a way to share another person's experience to create a common bond. Megan Oakleaf (2015, 357) indicates that it is important to communicate stories of student success to a variety of stakeholders: not only faculty, administrators, and families, but also to students themselves.

Post-event surveys and conversations indicated that the event was an enriching experience for many participants and created a sense of belonging to the SAIT community. While not articulated as an institutional priority, community is an important component of student and employee success and strengthens SAIT's reputation. To encourage participation, this event was timed to fit with other campus life initiatives: Student Development and Counselling offered a daily email for the "29 Days of Happiness," while

SAITSA was gearing up for a series of mental wellness events. This united campus focus on mental wellness and health related well to the selection of human books, who featured stories about struggling with mental illness, dealing with substance abuse and body-image issues, combating sexism in the trades, and building a life as a new Canadian. Due to the sensitive subject matter, human books were led through a pre-event workshop by an educational counselor, and on-site counseling support was available for all participants. One of the reasons this event worked at a polytechnic is that the stories were purposeful, authentic, and social. The emphasis placed on lived experience and knowledge also made this event a good fit for SAIT's institutional culture of applied learning and valuing of prior learning experiences. This social and informal learning opportunity allowed participants to interact with others outside of their social and academic program circles, and created a two-way teaching and learning relationship.

Research shows that social interactions are important to learning (Gilardi and Guglielmetti 2011, 35; Jacobs and Hundley 2010, 9–10). While peer interactions are important, faculty interactions may be of even greater importance to adult learners as these faculty serve as role models on how to learn, or specifically how to incorporate new knowledge into existing frameworks (Jacobs and Hundley 2010, 9–10). Through events such as Human Library, the library can facilitate reciprocal learning experiences by offering programs where students and faculty can interact as people and create a more meaningful relationship that enhances mutual respect. The library is not often associated with the social aspect of learning, but this event proved to the campus community that the library can play a role beyond book learning.

During the winter 2016 term, the library partnered with Student Employment Services (career services), the School of Business, and Alumni and Development to host a speed networking event for business program students. This event serves as another example of working with support service providers to increase the social aspects of learning as well as share event workload and costs. Speed networking takes its format from speed dating: small groups of three to four students rotate through six mentors in ten-minute sessions. After one hour of rotations, there is a short reception where students and mentors can follow up on earlier conversations. This allows students to continue practicing networking in a less-structured scenario than the speed networking rotations. Students and mentors are encouraged to exchange contact information and keep in touch after the event. The library initiated this collaboration by reaching out to Student Employment Services, who then reached out to involve the School of Business and Alumni and Development. As a test event, the decision was made to keep the event small and focus on one particular group of students. Since networking often takes place in busy public spaces, the organizers felt that the library's busy and

popular main floor space would provide the best approximation of a real-world networking environment.

With the library in place as host, each partner stepped up with unique contributions that highlighted their strengths: Student Employment Services offered pre-event workshops on networking skills and facilitated registration through their online portal; the School of Business promoted the event to business faculty and students; and Alumni and Development sought out alumni and businesspeople in the city to serve as mentors. The library shared the cost of catering with the School of Business, while Alumni and Development provided the gifts for the volunteer mentors. Due to the limited number of student spots available, promotion was done at a limited level; however, the event was fully registered within one day. Word of the event spread, and the group has now been approached by administrators in a number of different faculties to organize similar events for their students. By involving partners from all over campus, this event demonstrated how unlikely partnerships can help move SAIT toward its institutional priorities in student success, applied education innovation, and partnerships, as well as directly support graduate employment outcomes.

Step 4: Assessing the Plan

Recalling Kahu's (2013, 758) statement on "lack of distinction between the state of engagement, its antecedents and its consequences" as a problem in student engagement discourse, librarians should think about the outcomes, not the institutional effort put into creating the engagement opportunity, when assessing student engagement events and plans. These outcomes, despite what was intended, may be varied and substantially different than expected in both magnitude and direction due to participants' differences (Pascarella 2006, 512). Currently at SAIT Library, event attendance numbers are collected, and workshop participants are asked to reflect on what they have learned, but additional data would help to determine the effectiveness of current activities and the direction of future activities. While event attendance numbers are frequently used to prove an event's success, these individual events are part of a larger student engagement plan. This is not to say that participation data is unimportant but, ultimately, assessment should address the question: "What are the consequences of a student's participation in an event or a series of events?" A potential target for student engagement is student awareness of factors within their control, such as use of library services, and the impact of those factors on their success (Kahu 2013, 767). To ensure that the plan is meeting these targets, an upcoming library survey will examine student awareness of library engagement activities. The survey will ask students about their participation in library events and activities, how they heard about the events, barriers to participation, and the types of activ-

ities they would like to see. As it is the first survey on student engagement at the library, the results will also allow the library to set a benchmark for measuring progress. Utilizing information from ongoing assessment, the plan will evolve to address new student needs and wants.

CONCLUSION

In mapping these outreach activities in a student engagement plan, librarians should be cognizant of how these efforts foster the outcome of student engagement in the wider context of the post-secondary experience. The goals of individual outreach events should scaffold up to larger outcomes that match up with institutional priorities and culture, which may vary depending on the institution. At a polytechnic, student engagement activities need to respond to an applied education approach that values practicality and a diverse, non-traditional student body. A polytechnic librarian needs to investigate and understand the academic and nonacademic needs of polytechnic student sub-populations. Campus partnerships with students, staff, and faculty are essential in both understanding these needs and creating programming that addresses them in order to build a culture of student engagement on campus. Books, indeed, are not enough to sustain the library. At SAIT, the library rises to the challenge of addressing the diverse needs of polytechnic students through relevant and purposeful initiatives mapped in a cohesive engagement plan.

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Chapter Eleven

Student Library Advisory Boards

Engaging Students in the Library Experience and Communicating the Library's Value

Rebecca Barham, Seti Keshmiripour, Lilly Ramin,
and Mary Ann Venner

Academic libraries are finding dynamic ways to engage students and increase opportunities for student success, and establishing student library advisory boards is one avenue. Student advisory boards create opportunities for students to serve as library ambassadors, to learn more about library services, and to help market these services to their peers. Student ambassadors can be the voice of the student population and serve as indispensable advisors to library staff and administration because they provide direct and vital input on library services, programs, collections, and space needs for undergraduate and graduate students. This collaboration informs and drives library innovation while at the same time offers opportunities for students to learn soft skills such as collaborating with peers, problem solving with a team, managing meeting time, and practicing leadership outside of the classroom.

The University of North Texas (UNT), located in Denton, is a top-tier, public research university enrolling about 37,000 students. In 2013, the UNT Libraries created a graduate student library advisory board (GSLAB) as a pilot project in response to feedback from graduate students wanting a communication forum for improving library operations. The endeavor was very successful, and enabled graduate students to be more engaged in what was happening in the library. As a result of this success, the UNT Libraries also created an undergraduate student library advisory board (USLAB) in 2014 to gather feedback from that population. Each library board had two librarian faculty advisors from the public services areas of the libraries who assist with

organizing and facilitating meetings, marketing, and events. Both student library advisory boards were involved in activities that not only directly impacted students, but also gave valuable input on the physical and virtual spaces of the UNT Libraries. Collaboration between the two boards and their ambassadors included sponsoring finals week events, such as “Paws & Relax,” a pet therapy event, and “Coffee and Cookies with the UNT Libraries,” where ambassadors gave out the refreshments to students. Events such as these communicate to students that the libraries are there to help them in ways that go beyond traditional research support. This chapter will review the literature on the definition and function of student library advisory boards, and then describe how the UNT Libraries advisory boards were created, how they impacted students and the library, and the experiential learning opportunities provided to the ambassadors that can lead to student success.

LITERATURE REVIEW

An analysis of the literature on student library advisory boards indicates that a variety of terminology has been used for similar, yet distinct, concepts. Some libraries are using “library advisory board,” “library advisory committee,” or “library ambassadors” to refer to a group of students helping or supporting the library. The differences between these groups is not only in their names, but also in terms of their roles and responsibilities and the functions of their members. Some members serve in a voluntary, advisory role while others function more as active ambassadors, employed in fundraising and library advocacy (Deunk and Seiler 2006; Hasty 2001; Schander 2012).

Penn State Schuylkill, a campus of Pennsylvania State University, calls its student library board the “Library Student Advisory Board” (LSAB). Its members are involved in giving feedback on library policy and reflecting students’ concerns. The board established fundraising activities for purchasing library resources that students request (Deunk and Seiler 2006). “Student Advisory Council” is the term used by Georgia State University, College of Law Library for the group of students who provide direct feedback to librarians (Schander 2012). In addition, while the Florida International University (FIU) and Southampton Solent University are both using the term “Student Library Ambassadors” for their student library boards, their functions are completely different. The FIU library initiated a customer-service training program for student assistants to become library ambassadors to improve the quality of service offered at the library (Hasty 2001). On the other hand, the Southampton Solent library hires “Student Library Ambassadors” to help

with library operations, especially during the times when there is no full-time staff in the library (Barber 2009).

Despite these differences, offering support for the libraries is a common goal for most of these boards. Lee Teitel (1994, 5), a former director of the Educational Administration Program at the University of Massachusetts at Boston and one who has worked with advisory committees, defines an advisory committee as “a group of volunteers that meets regularly on a long-term basis to provide advice and/or support to an institution or one of its subunits.” As librarians assess the effectiveness of library services and resources, they often notice a gap between what librarians assume is beneficial for students and what students really need. To fill this gap, academic libraries have been trying to implement the concept of an advisory committee by establishing Student Library Advisory Boards (SLABs) that contribute input to the institution for developments and improvements. Different libraries utilize SLABs to involve students in the decision-making process related to library collections, services, and events (Dorney 2013).

These advisory boards establish opportunities for librarians to communicate with stakeholders and to keep up with the changes and trends in students’ needs and interests (Dorney 2013). SLAB members can help librarians gain a better understanding of students’ study preferences, information-seeking behaviors, and library concerns; solicit suggestions on how to improve library services; and assist the library with marketing. Not only can they market library resources, services, and events to their peers, but they can also inform librarians about which marketing materials work the best for students (Crowe 2010; Dorney 2013). Librarians at the University of North Carolina at Greensboro, for example, were surprised to hear their board members suggest traditional communication materials, such as flyers and posters, rather than social media (Crowe 2010).

From this literature review, it is clear that libraries utilize student library advisory boards for different reasons depending on the needs of the libraries. At UNT, the Graduate Student Library Advisory Board (GSLAB) and Undergraduate Student Library Advisory Board (USLAB) are more closely related to Teitel’s (1994) description because the boards are comprised of students who meet regularly on a voluntary basis to give advice and support to the UNT Libraries.

GSLAB FORMATION

In 2013, the UNT Libraries created student library advisory boards to improve outreach initiatives to our students. Two library faculty advisors were chosen by the assistant dean of Public Services to plan, design, and implement the boards. Both of the faculty advisors were public services librarians

who planned, developed, and implemented the boards with the support of their colleagues. The faculty advisors chose to begin with the formation of a graduate student library advisory board (GSLAB) in order to address LibQUAL survey comments made by graduate students that indicated a lack of awareness about library services.

The first step in GSLAB creation was establishing the framework of the board. The purpose/mission statement created for the GSLAB states, “The UNT Libraries strongly supports the research initiatives of our students with innovative services and high-quality resources and collections. The Graduate Student Library Advisory Board provides a forum for discussion and suggestions regarding all aspects of the Libraries related to research.” The faculty advisors wanted to make sure the goals of the GSLAB were clear and succinct, and focused strongly on feedback, collaboration, and service. The four goals of the GSLAB, and later the USLAB, were to:

- Provide feedback on current library services, programs, policies, resources, collections, and facilities;
- Provide recommendations on new services, research resources, and programs;
- Collaborate with the UNT Libraries on marketing programs to promote the value of the library with student peers; and
- Communicate information about library services and programs to the student community (UNT Libraries 2016).

Once the purpose and goals were established, the next step was to determine how many people would serve on the GSLAB and the length of their terms. It was decided that the board would consist of five to seven members, and meetings would be held twice a semester. Membership terms would be for one academic year with the option to continue the following year. Staggering membership terms promoted continuity on the board, but also allowed new members to offer fresh perspectives.

In order to facilitate a formal process for students to apply for board membership, the library faculty advisors created a web page that stated the purpose and goals of the GSLAB and included a link to the online application form (UNT Libraries 2016). The form asked applicants to provide their department or program, statement of interest, and previous interactions with the UNT Libraries. The applications gave insight into why many students were interested in joining the advisory boards, such as wanting to become more supportive of the libraries and a willingness to give back to the student community by sharing about the resources and services that were available to them. To be eligible, applicants had to be currently enrolled graduate students. GSLAB applications for the 2013–2014 academic year were accepted until October 1, 2013. The web page also mentioned how often GSLAB

would meet so that applicants would be aware of the time commitment beforehand.

To market the existence of the board, the faculty advisors worked with the UNT Libraries' User Interfaces Department, which maintains the library website, and the External Relations Department, which supports library marketing campaigns, to create online and print materials to solicit members. The faculty advisors also drafted an email to be sent to graduate students through the UNT Graduate Student Council. The ad was posted on the UNT Libraries' home page and at service desks. Twelve applications were received during the first board membership marketing campaign. The applicants represented both master's and doctoral students as well as distance learners from a wide range of academic backgrounds. Since it was the first library board of its kind at the UNT Libraries, the faculty advisors decided to invite all twelve members to serve on GSLAB for the initial year. All twelve applicants accepted.

The first meeting of GSLAB members and faculty advisors was scheduled with a Doodle Poll and held in October 2013. A Skype option was offered to those not able to attend the evening meeting in person. Library administrators were also invited, and pizza and beverages were provided. The faculty advisors outlined the mission and goals of the board. GSLAB members were asked how often they used the library and how they heard about what was happening in the library. The faculty advisors also wanted to know how the UNT Libraries could improve services to graduate students. Feedback received covered the areas of recall policies, checkout periods, writing assistance, quality of facilities, library spaces, collections, and accessing electronic resources. When asked what communication avenues worked best for graduate students, ambassadors noted that email messages were the preferred option. They also mentioned that they learned about library events and services from the library home page. Following the initial meeting, members were sent frequent emails to update them on library events, resources, and services, which they shared with other graduate students.

At the second meeting of the semester, held in November 2013, faculty advisors discussed naming the GSLAB members "ambassadors" to reflect their connection with the library and their ability to communicate with their peers. The members liked the idea and were excited to promote the value of the libraries to their student community. Participants also discussed launching a survey to graduate students to get their feedback on library services. Members brought comments from their fellow graduate students, and thought it would be helpful to do a library survey of just graduate students. A Blackboard Learn online organization workspace was created for coordinating communication among group members. A Qualtrics survey was designed completely by the GSLAB ambassadors and was launched in the spring

semester of 2014. The ambassadors worked with graduate student organizations, such as the Graduate Student Council, to get the word out. GSLAB ambassadors along with the faculty advisors also handed out print versions of the questionnaire for two hours outside the library during National Library Week. Although designed as a survey for graduate students, because it included a field where students could identify if they were graduate or undergraduate students, faculty advisors allowed undergraduates to fill out the print version as well, for the faculty advisors felt this specific feedback would be informative when creating an undergraduate student library advisory board in the future. The table event was a great opportunity for the library faculty advisors and the board ambassadors to interact with students. The survey results were analyzed by the ambassadors and faculty advisors, and a report was sent to library administrators. One hundred twenty-six graduate students filled out the survey.

The results indicated ways in which the libraries could be improved for graduate students, such as changing the checkout period for books; an analysis resulted in an extended checkout period for items from the general collections from six weeks to a semester for graduate students. Other areas of survey feedback revealed how graduate students wanted more quiet spaces in the library and better accuracy in the catalog regarding the availability of library materials. In the comments sections of the survey, graduate students noted difficulty in accessing online resources both in person and remotely. When asked about services they wished the UNT Libraries would provide, some services mentioned were already available, but students did not know about them. This feedback in particular informed the faculty advisors of areas where marketing of our services could be improved. The result of this assessment gave more details to the areas of improvement that GSLAB members mentioned were needed. GSLAB ambassadors felt empowered, knowing they had similar feedback and that a project they developed and launched could have a positive impact on library services for students.

Overall, the first year of the GSLAB was a success. A board was established, which resulted in librarian and student collaboration, and students' feedback and recommendations contributed to library improvements in spaces, services, and resources. The advisors agreed that the GSLAB functioned strongly as a focus group, and was an active participant interested in increasing the value of the library to graduate students.

USLAB FORMATION

In 2014, an undergraduate student library advisory board (USLAB) was created following the same pattern as the GSLAB, with the exception of eligibility, in that only currently enrolled undergraduates were eligible to

apply. The group also had two public-services librarian faculty advisors, including one who had worked with the GSLAB because she was familiar with the board implementation process. The membership marketing campaign for USLAB was carried out in a similar fashion to that of the GSLAB campaign, with the addition of working closely with the subject librarians to recruit members. The faculty advisors reached out to undergraduate organizations such as the Student Government Association to advertise the new undergraduate student library advisory board. Eleven applications were received, and the faculty advisors decided to accept them all as members. Similar to GSLAB, meetings were held with USLAB members in which information about library services and resources were shared. Additionally, USLAB members were asked to provide feedback about their experiences using library services, resources, and spaces.

The undergraduate student library advisory board added an interesting dynamic to how the library administration moved forward with strategic planning. As feedback was received from ambassadors of both boards, librarian advisors noticed distinct differences in what the students wanted from the libraries. The GSLAB ambassadors commented frequently how they wanted quieter spaces, expanded resources, and more print materials. The USLAB ambassadors' feedback was focused more on group study areas, computers, and events supporting finals week.

EVENTS

The librarian advisors are available to facilitate events throughout the year. During finals week events, ambassadors of both boards worked together to create and participate in activities to help students combat the stress of finals. The finals week events have been offered many times due to interest in helping students relax at a stressful time, and the high volume of students in the library. When asked what types of events students would like to see the libraries do during finals week, both GSLAB and USLAB ambassadors mentioned coffee and snacks because students were studying late into the night. The faculty advisors, along with ambassadors of both groups, collaborated on "Coffee and Cookies with the UNT Libraries." For two nights during finals week in May 2015, ambassadors of both boards staffed tables on the first floor of the main library and gave out refreshments. Feedback cards, library postcards, and "giveaways" were available. The library administration approved funding for the event at the request of the faculty advisors. Over six hundred cups of coffee were handed out by GSLAB and USLAB ambassadors. The events were highlighted in a blog post, "Coffee and Cookies a Big Hit During Finals Week." It was such a popular and engaging event for the ambassadors that it has been offered in subsequent semesters. As a result of

users' feedback, board games were added to the event in subsequent semesters.

Other finals-related outreach events, such as a "Good Luck with Finals" and "Paws & Relax," were planned by board members. On the UNT campus, a few albino squirrels are part of the squirrel population and there is a widely held belief by UNT students that it is good luck to see an albino squirrel before finals. To add some fun to the coffee and cookies events during finals week, the board advisors obtained a plush toy albino squirrel and suggested students take a selfie with it and post it on Twitter with the hashtag #luck-fromWillis. Students were excited and happy to see the albino squirrel and called it "a brilliant idea." For "Paws & Relax," a pet therapy event, both boards and the faculty advisors worked with Paws Across Texas, a pet therapy group, and the library administration to hold the event at the main library. For two hours during finals week, students could come by the library and de-stress by petting therapy dogs. Many positive comments were received from attendees through a suggestion box available at all the events. Comments along with highlights from the event were posted on the *University Libraries Serving Students blog* ("Paws & Relax Pet Therapy Event Held During Finals Week" 2015). The event was well received by students, library administration, and the boards' ambassadors, and is another event that has been repeated each semester due to its success. In fact, the event was featured on the NBC Channel 5 news (Scott 2015). As illustrated in marketing materials for finals week events (figure 11.1), even the faculty advisors joined in on the fun.

Marketing for the finals week events demonstrated a need for a single logo representing the library advisory boards to assist with branding. Both boards and advisors collaborated on the development of a single logo representing both groups by working with the External Relations Department of the UNT Libraries on the design. The logo (figure 11.2) met university and library marketing standards online and on campus. The logo has been used to brand any board-related activities and marketing materials. The creation of the logo gave a sense of permanence to the efforts the ambassadors contributed to the boards and provided them with a connection to the libraries.

The success of the finals week events, along with the valuable insights provided by GSLAB and USLAB ambassadors, have allowed the students serving on the boards to see how their engagement can improve the value of the libraries for all students. Meetings with library administrators also showed ambassadors that their opinions were appreciated, and that they can make a difference in improving library services for students. Ambassadors were able to serve in leadership roles that increased their engagement with the libraries, their constituents, and the campus as a whole. This type of engagement promotes experiential learning opportunities and student success.

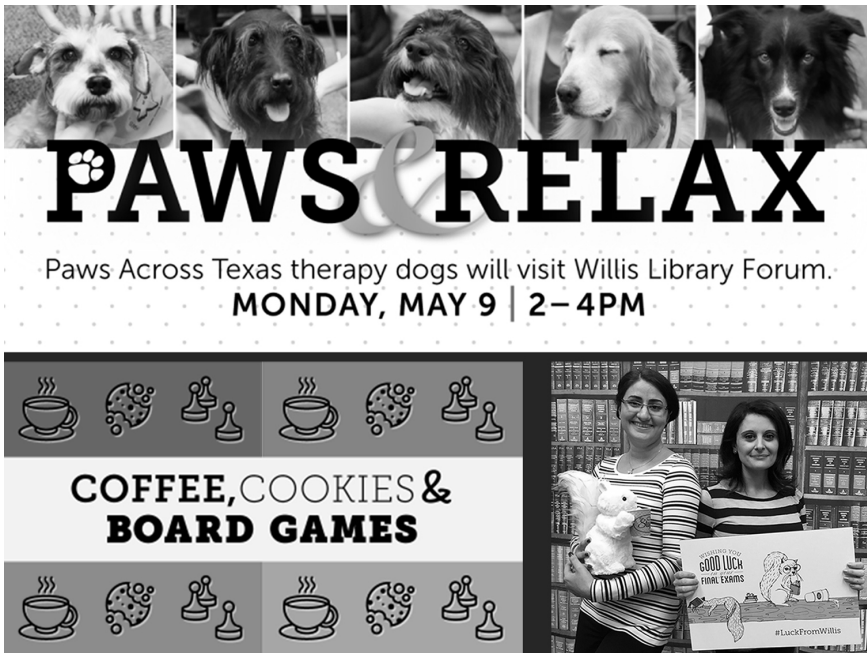


Figure 11.1. Finals week marketing materials

STUDENT SUCCESS OUTCOMES AND EXPERIENTIAL LEARNING OPPORTUNITIES

Student success is measured in a variety of ways. In academia, students are expected to learn the terminology, topics, and expertise in their field of study. As educator George Kuh (2003, 25) stated about student engagement, “College students learn more when they direct their efforts to a variety of educationally purposeful activities.” Their experiences inside the classroom are enhanced when combined with real-world applications. Libraries serve as guides to information, resources, and services that facilitate learning outside of the classroom. Student library advisory boards simulate the collaborative environments students will encounter when they graduate. The ability to work with their peers, find solutions to problems, and create learning experiences for others are just a few of the impactful ways that serving on a library advisory board affects student success.

The soft skills that ambassadors learn, such as problem solving, teamwork, communication, leadership, creativity, and time management, are actively developed as they decide on schedules and programs for meetings and events. Projects such as designing surveys, creating logos, and planning



Figure 11.2. UNT Libraries Student Library Advisory Board logo

spaces enhance their abilities to work as a team and solve real-world problems. As ambassadors, they practice communication with their peers and administrators.

Serving on a library advisory board also gives students the opportunity to learn more about library services and resources they can utilize to complete their class assignments. The more familiar a student becomes with a learning environment, the more likely they are to return. Library advisory board meetings held in the library aid in familiarizing students with an environment they may not have visited before (figure 11.3). As ambassadors, students gain knowledge about the libraries and are empowered to share that knowledge with others. The connections they make with other ambassadors engage stu-

dents in lifelong learning activities such as leadership, collaboration, and professionalism.

Students engage in learning activities by serving on the advisory boards, which can foster experiential learning and offer opportunities that lead to student success. Experiential learning is defined as “the process whereby knowledge is created through the transformation of experience” (Kolb 2015, 51). Experiential learning opportunities for students include an increase in information literacy skills, personal development and empowerment, social engagement and understanding of fellow undergraduates or graduates, and knowledge of the value of service activities. As board ambassadors, the students participated in meetings and activities that supported and enhanced their abilities to take initiative and engage creatively with their peers to solve problems. They worked together to identify ways to improve the library experience for their fellow students by providing their own feedback and reviewing the feedback of other students to identify tangible issues.

Information Literacy

As mentioned above, an assessment survey was launched to all UNT graduate students in spring 2014. The results of this assessment revealed that there were library services and research products available to graduates, but that they were unaware of or did not know how to use these resources. In order to address this information need, library board ambassadors were introduced to information literacy through overviews of library services, resources, and collections during their time of service on the boards. Over the course of their board terms, the ambassadors became increasingly aware of the broad array of library services and products available to them.

As a result of these insights, two projects were launched in an effort to increase graduate student awareness of library services and products. The first project was the creation of a new library web page about services and resources specifically for graduate students; Dr. Susan Smith, the new head



Figure 11.3. USLAB and GSLAB ambassadors

of the Library Research and Support Services Department at the UNT Libraries, provided this idea. This web page serves as an audience-specific resource that lists all services and resources available to graduate students in one place, and the URL was included on all marketing materials created for graduate students.

For the second project, GSLAB ambassadors provided information for a graduate student orientation presentation titled “Seven Things Graduate Students Need to Know About the Libraries” (see appendix). The “Seven Things” comprised a list of the services and products that the GSLAB ambassadors deemed to be the most important and useful to graduate students, and was advertised on the library home page for all graduate students to read.

Personal Development and Empowerment

By serving as library ambassadors, students increase their awareness and knowledge of library services and research resources, both in general and in their personal research area. This newly acquired knowledge has the potential for increasing the students’ personal development and empowering them to be better researchers and scholars. At each of our GSLAB and USLAB meetings, faculty advisors provided updates on new spaces, events, and collections, and highlighted library services such as interlibrary loan, graduate carrels, room reservations, research assistance, subject-specific librarians, and updates to the library website. In each meeting, ambassadors were presented with a bag of promotional items about the library that were related to core research services, makerspaces, outreach events, and special and digital collections.

As the library advisory board meetings progressed, the experiential learning opportunities for the ambassadors were provided in a three-stage process identified as awareness, engagement, and feedback. The faculty advisors worked with the ambassadors to discover how much they knew about the libraries. They then tailored information sessions in meetings to increase awareness of services and resources available at the libraries. After increasing this awareness through the question-and-answer information sessions, some students demonstrated a more advanced understanding of how library resources and services assisted them in their personal or academic research. The end result of this process was demonstrated at finals week events where ambassadors effectively promoted the library to their peers and answered their questions based on their previous knowledge about the libraries combined with what they learned through the board meetings.

Feedback from ambassadors also resulted in changes to library services that benefit all students as scholars and researchers. As a result of this feedback, the UNT Libraries expanded their user-centered services and workshops to benefit both undergraduate and graduate students, and collaborated

with the Learning Center to offer tutoring for undergraduates in the library. UNT Libraries also collaborated with the campus Writing Center to offer undergraduate and graduate writing assistance in the main library, a result of a specific suggestion from ambassadors on both boards. Another service the GSLAB ambassadors requested was additional writing time for dissertation and thesis writing beyond the monthly three-day dissertation boot camp in the library. To fulfill this request, an additional room in the library was reserved every Friday for students to continue to make progress in their writing endeavors.

Social Engagement and Understanding of Fellow Students

Student library board ambassadors come from different academic areas, and most of their time as students is usually spent working with other students in their same academic area. Serving as a student library ambassador gives the student the chance to work together as a team with other students outside of their academic areas, as they did with the logo project. This teamwork increases the student's ability to have a better understanding of other students from different backgrounds and academic areas, to see their similarities, and to improve learning bonds. The teamwork setting promotes opportunities for leadership and problem solving, which are transferable skills that can be used in their professional careers. A positive outcome from this type of social engagement allows students to feel more connected to the library and the university because they have a better awareness of the services offered to them and their peers. The experiences encountered while serving on the board become learning experiences outside of the classroom that ambassadors share with their fellow students. Ambassadors develop interactions with other students and find ways to grow within their field, and the diversity of the student library ambassadors helps as well, and ensures they can well represent the population they serve and are useful advisors to the library. In addition to building teamwork skills, student library ambassadors develop good citizenship skills when working on the USLAB and the GSLAB.

Knowledge of the Value of Service Activities

Becoming aware of the value of service activities is a final experiential learning opportunity for library student ambassadors. This was most apparent when the students observed how their input created more of a student-centered library. For instance, ambassadors know that the finals week is a stressful time of the semester, but when they worked at the "Paws & Relax" pet therapy event, they received direct feedback from fellow students who stated that they were less stressed after the event.

BENEFITS TO THE LIBRARY

The undergraduate and graduate students on the USLAB and the GSLAB have valuable perspectives to offer library administration because they are representatives of the primary groups the UNT Libraries serve. The ambassadors have provided insight and feedback on several important projects of interest to the UNT Libraries, including space planning and, as discussed above, surveys of the undergraduate and graduate student populations.

In July 2015, USLAB and GSLAB ambassadors participated in the Willis Library Space Planning event with a UNT Libraries space consultant. Their contributions were recorded and given directly to the consultant and library administration and used to inform decisions for undergraduate and graduate spaces in the UNT Libraries. In the summer of 2015 and March 2016, GSLAB ambassadors provided feedback on a graduate student study space in the main library building. The March meeting included a tour of two different library floors with UNT Libraries dean, Dr. Martin Halbert. In addition, some GSLAB ambassadors joined in the Scholars' Spaces study survey and/or the focus group that asked graduate students to share pictures of the places where they study and their ideal places to study. Feedback and input on space planning has been paramount as the UNT Libraries move forward in the creation of a graduate commons space within the main library.

USLAB and GSLAB meetings held with ambassadors, librarians, and library administration build relationships. These relationships ensure that the lines of communication and trust are open to relay important information back and forth to all interested parties. Meetings with the dean of UNT Libraries, in which input and feedback are shared, demonstrates that library administration cares about the needs of the students.

Library student ambassadors who participate in experiential learning opportunities while members of USLAB and GSLAB become advocates for the libraries as they go out and further interact with other students in their academic areas, or with other student organizations on campus such as the Graduate Student Council or the Graduate School. Because of the transparency of communication and trust, ambassadors can correct misconceptions about the library that might be held by other individuals who have less contact with the libraries on campus and in the community.

Hence, library boards bridge academics and experiential learning to enhance the university experience. During the UNT Student Symposium held in May 2015, one GSLAB ambassador who was serving on a graduate student panel stated that the libraries were very valuable because of the research support he received and the resources available to him. His ability to communicate the library's value to other graduate students and how it impacted his education was a powerful testimony of how libraries can positively affect academic careers.

RECOMMENDATIONS FOR CREATING A SUCCESSFUL BOARD

Library advisory boards can have a lasting impact on the services, events, programs, collections, and promotional efforts of an academic library. Boards are effective when their ambassadors are actively engaged members. It is crucial to set realistic expectations and roles for the boards in order to have the greatest impact on the libraries and the student experience. Motivation is a key component in establishing a strong library advisory board. To have a greater impact on student success, librarians should look at the characteristics of the members and their use of the library when establishing agendas and goals. In general, surveys and feedback from students inform our assumptions about undergraduate and graduate students. A board consisting of students at various levels and majors gives a more holistic view of what the users really want and need from their academic library. In addition, the ambassadors inform librarians and administrators how they can better help students succeed.

As the experiences described here demonstrate, student library advisory boards allow library administrators to have direct, beneficial interactions with students. Attending GSLAB and USLAB meetings, library administrators were able to converse with students on subjects such as space planning, services, facilities, and resources. Having the ability to ask questions and clarify intentions, administrators became better informed about what students wanted and the reasons behind those requests. This type of feedback provided added value to the comments received in the various surveys the libraries and GSLAB conducted. As a result, strategic planning for the libraries was more strongly focused on supporting student success. User feedback is a fundamental communication tool that improves a library environment and provides a blueprint for strategic planning moving forward.

CONCLUSION

Creating student library advisory boards is a worthwhile endeavor for academic libraries to pursue because of the valuable, direct feedback they receive from the student ambassadors. There are symbiotic benefits to both the students and library administration. Students who are members of library advisory boards become more aware of library services and collections, increase their information literacy skills, and become ambassadors to their learning communities. They are tremendous assets to the libraries because they effectively communicate the library's value to their peers, and provide feedback through their active participation in meetings, focus groups, and student events. They dynamically illustrate how libraries and students can collaborate to design spaces and services that facilitate learning. The trans-

ferable skills ambassadors develop while serving on the library board include leadership, problem solving, teamwork, and interpersonal skills. These are areas that not only impact their academic careers while at the university, but also their professional lives. Although it takes time to develop student library advisory boards, the investment is worthwhile for libraries and for students. The input from ambassadors serves to create a more student-centered library for undergraduates and graduates, and ensures that the library remains relevant to two of the main populations served, and central to the academic life of the university at large.

APPENDIX: SEVEN THINGS GRADUATE STUDENTS NEED TO KNOW ABOUT THE LIBRARIES

1. The UNT Library system is invested in seeing graduate students be successful at UNT. If you have questions, requests, comments, etc., feel free to reach out to the library and let them know! Go to “Ask Us” on www.library.unt.edu or contact the Library Research Support Services Department at lrss@unt.edu.
2. If you also teach at UNT, the library system has great resources for you! The media library has a theater you can reserve for films, Willis has rooms you can reserve for library introductions or class work, and the available technology and group work areas make it a great collaboration space.
3. Subject librarians for each college are there to help, they like to help, and they are really good at what they do! Go to them for help with finding resources, style guides, and available support from the library: www.library.unt.edu/subject-librarians.
4. Items checked out from the library are yours for a semester (assuming they are not recalled) and can be rechecked online at www.library.unt.edu if needed for another semester.
5. You are not limited to books and articles the UNT Library has on the shelf. Request an item from remote storage or our Inter Library Loan (ILL) program to quickly and easily get what you need.
6. There are multiple libraries on campus: Willis Library, Discovery Park, Eagle Commons, Media Library, and Music Library. Smaller libraries like the Eagle Commons and the lower level and fourth floors of Willis Library are quieter and are great study and writing spots.
7. The Willis Library is open 24/7 and has the best coffee on campus in the Study! You know what else is open 24/7? The library website: www.library.unt.edu.

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Chapter Twelve

Supporting Graduate Education

Leveraging Library Workshops and Campus Partnerships

Deborah Lee

Outreach and marketing activities that focus on graduate students can be a challenge. Different disciplines bring varying assumptions about research strategies and appropriate professional development. The academic library, however, is ideally situated to both tap into existing paradigms regarding information and research literacies as well as develop strategic partnerships with campus departments and organizations in support of graduate student professional development. These partnerships can magnify the impact and reach of any outreach initiative targeting graduate students.

This chapter will draw upon the case of Mississippi State University (MSU) Libraries, which incorporated outreach to graduate students into its strategic plan. Through organizational restructuring, the creation of professional development workshops, and the development of key campus partnerships, the MSU Libraries administration has been able to both effectively support graduate students and promote related resources and services to the graduate faculty.

LITERATURE REVIEW

A number of issues have been examined in terms of library support for and outreach to graduate students. Both the research literature and professional organizations have placed an emphasis on information literacy and research skill development as part of graduate education. The *Information Literacy Standards for Higher Education* were adopted by the Association of College & Research Libraries (ACRL) in 2000. While not specifically addressing

graduate students, the standards formed the basis of a widely accepted view of information literacy for all levels of higher education. In 2016, ACRL adopted a revised form of the standards known as the *Framework for Information Literacy in Higher Education*. These frameworks provide a broader concept of information literacy and are anchored by six core concepts: authority is constructed and contextual, information creation as a process, information has value, research as inquiry, scholarship as conversation, searching as strategic exploration (ACRL 2016a; 2016b). Like the previous standards, the frameworks continue to provide guidance in the development of graduate student outreach programs.

Many academic library organizations have specifically addressed the information and research needs of graduate students. In 2007, the Association of Research Libraries (ARL) sponsored a meeting of faculty, administrators, and libraries entitled “Enhancing Graduate Education” (Goldenberg-Hart 2008). Those in attendance discussed the need to build collaborative models that enhanced graduate education, increased student retention and graduation, and taught the skills necessary for a twenty-first-century workforce. ARL followed this meeting with a report entitled *New Roles for New Times: Research Library Services for Graduate Students* (Covert-Vail and Collard 2012). The researchers studied graduate student services and needs at ARL member libraries across the United States and Canada, and made six recommendations:

1. Libraries should develop a suite of specialized services related to the many roles graduate students assume (teacher, scholar, student, researcher).
2. Libraries should create new spaces for graduate students that fit the way they work and that contribute to building community.
3. Libraries should create an internal structure to support graduate student services.
4. Libraries need to foster strategic alliances and collaborations with key campus organizations.
5. Libraries should adopt an internal organization that is flexible and encourages innovation.
6. Libraries should share their experiences (successes and failures) in meeting the needs of graduate students. (Covert-Vail and Collard 2012, 6–7)

Academic libraries have developed several strategies to meet the needs identified in the ARL report. One approach is to implement targeted workshops and support services based on academic discipline. Bonnie Fong and Darren Hansen (2012) reported on the program for research groups at Rutgers University, Newark. The effort focused on the introduction of a series of

workshops (or a mini-course) for graduate students in the chemistry program. Five workshops were designed to incorporate common information literacy topics such as search techniques appropriate to specific scientific databases. Like many other projects involving graduate students, the sessions also covered specific skills needed by scholars-in-training, including the use of reference management software and data management strategies. Fong and Hansen found the low student-instructor ratio of the program required a good deal of library staffing, but also provided the flexibility to respond to specific student or class needs. While a strong relationship with graduate students was one of the positive outcomes of the program, the authors concluded that the ability to scale such an approach to a large graduate population was unlikely.

Subject-specific credit or non-credit classes offer many benefits. However, library staffing availability compared to the size of the graduate program may not make this a viable option. As an alternative, academic libraries have often employed a workshop approach to meeting graduate student research needs. One typical example is that of the Taylor Library at the University of Western Ontario. After conducting a needs assessment of graduate students, a series of voluntary workshops was developed that in many ways closely mirrors the ACRL frameworks. The workshop topics included introduction to library services, the scholarly communication process, database instruction, writing the research paper, the ethical use of information, search strategies and awareness options in databases, and instruction in the use of bibliographic management software (Hoffmann et al. 2008).

Many researchers have advocated for increased instruction and support for graduate students. Academic libraries have responded by offering specialized graduate student workshops that focus on both the writing of a literature review and the broader issues of forming a scholarly identity. For example, David Boote and Penny Beile (2005) examined the role of dissertation literature reviews and the skills needed by graduate students to successfully complete the dissertation. They found that the “new focus of libraries on teaching students to critically engage with information offers the possibility of successful faculty-librarian collaboration, especially in the realm of literature review and writing” (Boote and Beile 2005, 12). Likewise, the Council of Library Information Resources (CLIR) has found that libraries can have a positive impact on graduate student retention and completion rates. In a study partially funded by CLIR, researchers at Columbia and Cornell University investigated the progress of humanities doctoral graduate students (Gessner et al. 2011). The researchers found that the factors affecting successful completion of the humanities doctorate vary, but that the library can have a significant impact. The researchers also suggested that libraries can help foster a scholarly identity for graduate students through “hosting writing or discussion groups to inspire increased productivity during

the dissertation-writing process” and by “working with departments to establish best practices for students who wish to publish before graduation” (Gessner et al. 2011, 13).

The MSU Libraries have found that the development of a core set of workshops, targeted specifically toward the professional development needs of graduate students, can both meet student needs and form the foundation for other campus outreach initiatives. This allows the library to leverage the investment in workshops to form strategic partnerships with stakeholders and increase the visibility of library research resources and services.

MISSISSIPPI STATE UNIVERSITY AND GRADUATE EDUCATION

Background

Mississippi State University is a land-grant research university with the Carnegie Foundation for the Advancement of Teaching designation of “doctoral research—higher research activity.” In 2015–2016, total enrollment was 23,779 students, with 4,313 or 18.1 percent classified as graduate or professional students (Mississippi State University 2016). Approximately half of the graduate and professional students are classified as part-time students (Mississippi State University, the Graduate School 2016). MSU supports 140 graduate majors or concentrations across eight colleges (Mississippi State University 2017), and graduate programming is offered on the Starkville, Mississippi, main campus as well as the Meridian, Mississippi, campus and through an online education program.

MSU Libraries is the academic library system that provides research resources and services to the MSU community. Mirroring the graduate program, the MSU Libraries provides support through three Starkville locations (a main library and branch libraries for architecture and veterinary science); the Meridian campus (with libraries on the main campus and at a downtown remote campus); a small Jackson, Mississippi, branch; and an online portal and website.

Building Library Services for Graduate Students

MSU Libraries places a strong emphasis on outreach to the campus community, and the 2013–2017 Strategic Plan explicitly addresses graduate students in both the teaching and research sections. The plan lays out a number of action steps to provide customized services to graduate students and to enhance the services offered in support of graduate student learning, research, and teaching (Mississippi State University, University Libraries 2016, 4–7).

Two organizational steps were taken to institutionalize support for graduate students. One was the formation of a coordinator position (similar to a

department head in title and function) tasked specifically with promoting and developing graduate student services. Given the size of the graduate program at MSU, one person or even one department cannot provide the full range of services needed. The Graduate Student Services (GSS) coordinator works across organizational lines within the library to identify both needed services and to promote relevant resources and services to the graduate student community.

The second organizational change was the establishment of the Graduate Student Services Committee. The GSS coordinator serves as the chair of the committee, and membership includes representatives from a number of relevant library departments. Key to the success of the committee is the inclusion of members from external stakeholders, including representation from the Office of the Graduate School and graduate students from the Graduate Student Association. This connection to the graduate faculty and students greatly assists with collaborative efforts and the development of supporting services. For example, a “3-Minute Thesis” competition sponsored by the Graduate School was supplemented with library workshops on presentation techniques and PowerPoint slide design. These workshops targeted graduate students participating in the competition.

Lucinda Covert-Vail and Scott Collard (2012, 6) recommend that “research libraries should align and design their services for the full spectrum of the graduate student lifecycle—teacher, student, scholar, writer, and researcher.” One successful way to do this is through the development and promotion of workshops that target the different tasks and roles graduate students assume throughout their graduate study. While the MSU Libraries offer instructional support to graduate classes through “one-shot” library instruction sessions, they have also developed several workshops designed to meet both technology and information literacy needs (Lee 2004). The range of workshop topics addresses both the research and professional development needs of graduate students, and sessions are heavily promoted to both the graduate faculty and the graduate student community. An evaluation process provides feedback on the efficacy of the workshops and gives participants the opportunity to suggest new topics for future workshop development. This evaluation process includes both print (for face-to-face sessions) and online (for online workshops) surveys that allow participants to provide feedback on the workshop, request additional information, and suggest topics for future workshops.

MSU Libraries have used targeted marketing practices to develop and promote the workshops. The workshops offered through the GSS coordinator are “packaged” into two workshop series: the Survival Skills for Graduate Students (SSFGS) and the Practical Professor (PP) workshop series. These workshops have been offered for over fifteen years, and some generalizations can be made based on this experience. First, both graduate students and

faculty prefer workshops that meet a specific need. General workshops based on specific databases (with one exception noted below) or research in a given area are typically not well attended. Workshops that can narrowly target a task or need, such as a workshop specifically addressing the development of a thesis or dissertation literature review, tend to have higher attendance.

Second, promoting a workshop series toward graduate students can be a successful strategy, but these students can also be attracted to other sessions if they can relate to the topic. For example, a faculty workshop on citation analysis and alternative metrics will often draw a good number of graduate student attendees as well. Faculty, on the other hand, tend to be wary of attending a session that has been heavily branded for graduate students, even when they share the same need. A workshop on curriculum vitae development (see below) is equally applicable to both graduate students and faculty. However, experience with the workshop has shown that it helps to “cross-list” the workshop in both the SSFGS and PP series so that both faculty and graduate students feel comfortable attending the session. Finally, building collaborations with other campus stakeholders can help leverage the impact of the workshop series and build new constituencies for the library. This final point will be explored in more depth later in the chapter.

Workshops

The Survival Skills for Graduate Students (SSFGS) workshops began, in part, to meet the needs created by a reorganization of the Graduate School. This reorganization moved much of the professional development and graduate student contact into the academic departments. The void left by this reorganization created an opportunity that the SSFGS workshops gradually filled. While this organizational model is no longer used by the MSU Graduate School, the graduate student services and workshops developed by the MSU Libraries have become an integral part of the professional development plan for the campus community.

The workshops are taught by the GSS coordinator and serve as a major component of her current job description. The workshop series was developed by the coordinator in 1997 as part of the library’s more general instructional program. The genesis for the workshops grew out of the coordinator’s experience in graduate classes at Mississippi State University. The first two workshops developed, “Demystifying the Dissertation Process” and “Developing a Literature Review,” appear at first to be typical information literacy sessions. The strategy in development, however, was to push subject-specific search strategies and assistance to the subject-specific research librarians in the Research Services Department through the use of the individual research consultation service (Lee 2004). The “Demystifying the Dissertation Process” workshop focuses on strategies to start, plan, and complete a thesis or

dissertation. The “Developing a Literature Review” workshop, likewise, covers the planning and implementation of a literature review, with students referred to the Research Services Department for assistance with specific database instruction and topic development.

Feedback from workshop participants and graduate faculty, as well as questions from the graduate student community, led to the introduction of a number of new workshops. The “Crafting the Winning CV” workshop grew out of a frustration with local career support that focused almost exclusively on résumé writing. Graduate students (and faculty) pursuing a career in higher education often find they need more information on the specialized components found in a curriculum vitae (CV). This workshop provides information on suggested best practices for CV development, and promotes an understanding of the culture of higher education. In a similar way, the workshop “Landing on the Tenure Track: Job Hunting in Academe” specifically addresses the job search process for tenure-track faculty or post-doctoral positions. The workshop covers issues relevant to graduate student success such as timing a job search, common components of the application packet, preparing for the job interview and, again, a discussion of the norms and culture of academic life. These new workshops were researched and designed by the GSS coordinator in consultation with related services on campus, including the Writing Center, the Career Center, and the Center for Teaching and Learning.

Graduate students often want to publish their research prior to graduation; many are in programs that either strongly encourage or require publications or presentations at national conferences as part of the doctoral program. Ideally, mentoring for this type of activity occurs at the level of the academic department, but feedback from graduate students on workshop evaluations indicated a need for additional support. The MSU Libraries developed the “Publishing 101: Navigating the Academic Publishing Process” workshop to meet this need. This workshop introduces graduate students to the norms and expectations of the academic publishing process and offers advice on building relationships with editors and reviewers. An increased emphasis on research ethics at the university level led to the creation of the “Research Ethics and the Graduate Student” workshop. This session covers both the MSU Honor Code and other areas typically included under the rubric of responsible conduct of research. One of the newest workshops, “Money 101 for Grad Students: Managing Your Money and Your Debt” teaches basic financial literacy skills and connects graduate students to resources both on and off campus. The GSS coordinator’s academic and instructional background in economics made this workshop a good fit for the SSFGS workshop series.

Several new workshops are under development at the request of graduate students and faculty. Two are related to the job search process. Graduate

students report needing both a teaching philosophy and a research statement as part of their academic application packet. While these items are briefly discussed as part of the overall job search workshop, the need for additional support has become apparent. A new workshop on teaching philosophy statements, offered in partnership with the Center for Teaching and Learning, is in development. A second workshop, in development with the Office of Research and Economic Development, will focus on writing the research statement as part of an application packet.

All of the Survival Skills for Graduate Students workshops are taught in both a face-to-face and online format. The online option provides campus students with more flexibility in workshop attendance and allows workshop access to graduate students enrolled in a distance program. While the target audience for the SSFGS workshops is graduate students, these workshops are free and open to any interested member of the MSU community.

The Practical Professor (PP) workshop series allow for targeted marketing to both graduate students and faculty. These workshops are taught by the GSS coordinator and library faculty from the Research Services Department. The content of the workshops covers a broad range of topics, loosely focused on the research skills that faculty and graduate students often need. One workshop consistently offered is the “Copyright in Academia” session. Copyright can be a confusing topic for both faculty and graduate students, and this workshop provides an overview of some of the most essential concepts for those working in higher education. As part of the MSU Libraries’ overall scholarly communication project, a second copyright workshop was recently introduced. The new workshop, “Before You Sign: Understanding Your Rights as an Author,” introduces the concept of authors’ rights and open access. It serves as a companion workshop to both the PP copyright workshop and the SSFGS workshop on academic publishing. Likewise, the “Who’s Citing You? Tracking the Impact of Your Research” workshop has been incorporated into the MSU Libraries’ scholarly communication initiative. The workshop traditionally focused on the process of citation tracking, but has recently been expanded to cover the emerging array of social media and web-based services, such as ResearchGate and Academia.edu. In the twenty-first century, scholars find they need additional skills to manage their online research persona. The “Who’s Citing You?” workshop has been modified to provide an introduction to this type of information and refers users to the subject-specific research librarians for additional one-on-one assistance.

The MSU Libraries’ workshops have increasingly focused on research, publishing, and issues related to faculty professional development. This has led to increasing requests for additional support related to the writing tasks associated with research. Two workshops have been introduced within the past two years to address this need. One is titled “Research and Writing: Improving Your Research Productivity,” which provides strategies drawn

from the literature on developing and maintaining a productive research agenda. The second is “Research and Writing: Strategies for Effective Writing with Quantitative Data.” An analysis of the attendance at both the PP and the SSFGS workshop series documents the prevalence of STEM (science-technology-engineering-mathematics) faculty and students. While the MSU Libraries have a strong collaborative relationship with the campus Writing Center, the focus of the Writing Center’s programming typically is not directed toward quantitative research. No other unit on campus currently addresses this need. This vacuum created an opportunity for the MSU Libraries to develop programming specifically targeted toward STEM faculty and graduate students.

While database-specific workshops have not been highly successful, there is one exception. The workshop “Power Up Your Research Productivity with Scopus” moves beyond the typical “how-to” database instruction and includes coverage of the research and author profiling options within the database Scopus. Attendees learn how to mine the database for information about the publication history of a topic, explore strategies for locating post-doctoral opportunities and research funding, and investigate ways to use the author profile options to build a curriculum vitae or promotion and tenure dossier.

Leveraging the Impact of Library Workshops

The workshops offered through the Survival Skills for Graduate Students and Practical Professor workshop series provide a foundation for promoting library services and resources to graduate students and faculty. One option for building on the success of these targeted, topical workshops is to offer them as traditional one-shot library instruction sessions. Faculty teaching graduate seminars may request any workshop for their course, and the content can easily be “tweaked” to focus on the needs of a specific discipline. For example, a professor teaching a graduate seminar for first-year computer science engineering students requests the research ethics workshop each year. The content is modified to pull examples specifically from computer science, but the overall structure of the workshop remains the same. Other academic departments utilize the workshops to augment their own professional development activities. Some will request sessions of the workshop be offered to graduate student groups; others require graduate students to attend a given number of workshops as part of their graduate program for the year (the library provides attendance confirmation upon the request of the student). The graduate program in education, for example, has required graduate student attendance at two or more workshops prior to sitting for the comprehensive examinations. Faculty in both the engineering and the education graduate programs have used the workshops in their application for federal funding

in support of graduate education. The workshops are typically included as a type of institutional “in-kind” support in the grant proposals.

Another successful strategy is to build cross-promotion into library services. As mentioned above, workshops offered through the GSS coordinator’s office heavily advertise the research consultation service offered through the library’s Department of Research Services. Other relevant workshops taught by the library’s Digital Media Center and the Office of Thesis and Dissertation Format Review are also promoted; these departments also provide publicity for the graduate student workshops as appropriate.

Campus departments and organizations external to the library also seek to promote workshops and services to graduate students. Building relationships and collaborative initiatives with these units can be a way of both helping students connect to needed services and promoting library services to new groups. One successful collaboration has been with the MSU Writing Center. Writing is an important and stressful part of graduate student life. Many MSU graduate students are unaware of the Writing Center or assume its services are mainly for undergraduates. To help raise awareness of their services, the MSU Libraries partnered with the Writing Center to promote the joint use of services. The Research Services Department created a space for writing tutors from the Writing Center. Writing tutors are now located in the library five nights a week, and references are incorporated into the library’s graduate student workshops as appropriate. Likewise, the Writing Center helps to promote the library’s graduate student workshops. Beginning in spring 2016, the two areas worked jointly to offer workshops in the publishing process for graduate students. Greater communication between graduate student services in the library and the Writing Center has helped to raise awareness about common problems graduate students encounter, especially in the dissertation writing process.

This awareness led to an extended series of discussions between the MSU Libraries, the Writing Center, the Learning Center, and the Center for Teaching and Learning. The units came together and sponsored the campus’s first “Dissertation Jumpstart.” This was a daylong (Saturday) event that provided in-depth support for graduate students at the post-proposal stage of writing a dissertation. A pilot launched in spring 2016 focused on graduate students in the MSU College of Education. The day included workshop material from all four areas sponsoring the event and provided extended writing time, with librarians and writing tutors available for consultation. The program is currently being revised based on feedback from the pilot project, and will be offered to graduate students in the future.

Workshops have also been incorporated into other campus activities designed to support the professional development of graduate students. One such project has been the implementation of the Preparing Future Faculty (PFF) program. The initiative began and has continued under the leadership

of three areas: the Graduate School, the Center for Teaching and Learning, and the MSU Libraries. Personnel from these units, in collaboration with an interested faculty member from the College of Business, were tasked by the dean of the Graduate School to create a professional development program targeting doctoral students planning a career in higher education. Existing workshops taught by the MSU Libraries and the Center for Teaching and Learning formed the core of the PFF, and additional sessions were built around these workshops to round out the PFF. This both increased the visibility of the workshops and provided the opportunity to promote other library services to this group.

Several campus-wide initiatives have provided opportunities to incorporate library workshops. One focus has been an increased discussion of academic integrity issues at both the undergraduate and graduate student level. The Honor Code Office, maintained within the Office of Student Affairs, annually sponsors an Academic Integrity Week. The graduate research ethics workshop is timed to fall within this week and thus becomes part of the library's support of the process across campus. Likewise, a concern with financial literacy led to the formation of a working group that applied for and received a grant from the Council on Graduate Studies. This working group and project became known across campus as the Maroon Money Management project. The library did not previously offer a workshop in this area; as part of participation in the grant, a new Survival Skills for Graduate Students workshop was developed. This workshop became part of the library's support of the nationwide Money Smart Week initiative as well (American Library Association 2016).

Another useful campus partnership has been with the MSU Office of Research and Economic Development (ORED). This office coordinates the research and grant funding on campus. The "Crafting the Winning Curriculum Vitae" workshop has been offered through the ORED Professional Development workshop series, which significantly widened the audience for this session. The curriculum vitae workshop led to discussions about the use of CVs across campus and to the development of an ORED statement of best practices. The library's CV workshop is heavily referenced in the best practices document, and is cited as an important campus resource for more information. This discussion also led to specialized workshops on the National Library of Medicine's SciENcv tool and the My Bibliography function in PubMed, as well as a workshop on crafting biosketches for the National Science Foundation and the National Institutes of Health grant applications. These specialized workshops were developed and taught by the library's GSS coordinator and the associate director from the campus Writing Center. Building these relationships with ORED has helped to promote library services to graduate students and faculty, as well as research staff.

The feedback from graduate students can be helpful even when it may not appear to be directly applicable to library services. The workshop evaluation form routinely asks participants what workshop(s) they would like that are not currently on the schedule. One request that has emerged both from workshop evaluation data and from requests to the GSS coordinator is a grant funding workshop targeted specifically at graduate students. Most of the requests came from graduate students in the STEM area, which raised an interesting question: How do we support this need when the expertise might not be in the library? The GSS coordinator worked with the dean of the Graduate School, the assistant vice president for research from ORED, and the associate director of the Writing Center to address these issues. A pilot project was developed for the 2017 academic year and will be offered through ORED, but will include sessions by both the MSU Libraries and the Writing Center. The first workshop will consist of a panel of new faculty discussing their first grant application; the second will be a workshop offered by the MSU Libraries that focuses on searching for grant opportunities; and the third will be led by the Writing Center and focus on successful grant writing strategies. Projects such as this allow the library to partner with other campus units to develop programming, promote library resources, and reach audiences that may not be aware of library services.

CONCLUSIONS

Library workshops for graduate students are not new. Academic libraries have used workshops to meet the professional development and research needs of graduate students for some time. Given limited resources and staffing, leveraging existing workshop opportunities by building collaborations with faculty and external campus departments can help promote library services. These collaborative endeavors can be key to identifying and meeting the research and professional needs of graduate students.

Libraries seeking to extend the reach of their workshops might consider the following options: Identify units across campus that serve the same target group—in this case, graduate students. What services do these units offer? How open might they be to joint projects? To promoting library workshops and services? Examine the strategic plan of other campus organizations and departments. How do they address graduate student development? Would the services offered through the library meet those needs?

Engage graduate faculty about the needs of their students and involve graduate students in the development and promotion of the sessions. Graduate students are asked as part of the workshop evaluation how they heard about the session. The number one source for referrals to the workshops is the student's graduate advisor or committee chair. Publicizing the workshops

to the graduate faculty has been a very successful way of promoting workshops to graduate students. The GSS coordinator meets each semester with the Graduate Student Association. This provides an opportunity to advertise library services, but it is also an opportunity to discuss graduate student frustrations with both research and the library. This supplements data drawn from library-wide user assessments.

Library workshops can be a successful means of both meeting the professional development needs of graduate students and advocating for library services and resources. Leveraging the workshops with partnerships and key marketing strategies to stakeholders such as graduate faculty can be part of the library's overall strategic plan for supporting graduate students.

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About the Editors and Contributors

Peggy Keeran (MLIS, MA), is a professor and the Arts and Humanities librarian at the University of Denver Libraries, and coordinator of the faculty advisory group to the library. She is the coeditor of the Rowman & Littlefield series *Literary Research: Strategies and Sources*, and has coauthored three of the volumes in the series. She has also coedited both editions of *Research within the Disciplines: Foundations for Reference and Library Instruction*, and coauthored “Expanding Support for Graduate Students: Library Workshops on Research Funding Opportunities.” Most recently her research interests include collaborations on instruction between Reference and Special Collections, and with her colleagues she coauthored “‘If You Want the History of a White Man, You Go to the Library’: Critiquing Our Legacy, Addressing Our Library Collections Gaps.”

Carrie Forbes (MLS, MA), associate professor and associate dean, oversees the University of Denver Libraries’ public services, including research support, instruction, outreach/programming, and borrowing and lending services. She coedited, along with Jennifer Bowers, *Rethinking Reference for Academic Libraries: Innovative Developments and Future*, published by Rowman & Littlefield in 2014. Other recent publications include a coauthored chapter in *Academic Librarianship Today* on reference and instruction models, and a co-written article in *College & Research Libraries* on “Expanding Support for Graduate Students: Library Workshops on Research Funding Opportunities.” Her other research interests include critical information literacy, library assessment, and co-teaching partnerships between librarians and faculty.

* * *

Rebecca Barham has been the Art, Dance & Theatre reference librarian since 2003, and member of the Library Research Support Services Department at the University of North Texas (UNT) since 2015. Rebecca's research interests include fine art valuation, art iconography, library services for students and faculty, and innovative library space design. She has a BFA in art history, an MFA in painting and drawing, and an MLIS from the University of North Texas.

Naomi Bishop is currently a Science and Engineering Teaching, Learning, and Research Services librarian at Northern Arizona University. Previously, she worked as the Science and Engineering librarian at the University of Denver. She worked as a solo research librarian at Roche Tissue Diagnostics in Tucson, Arizona. From 2010–2012, she was the Librarian in Residence at University of Notre Dame. She received her MLIS degree from University of Washington in 2010. Naomi holds a BA in German studies from the University of Arizona. She is a member of the Association of Tribal Archives, Libraries, and Museums, the American Indian Science and Engineering Society, and the American Indian Library Association. Her passion is connecting people with information that fuels innovation and discovery.

Esther L. Gil is an associate professor and the Business & Economics reference librarian at the University of Denver (DU). She supports the curricular and research missions of DU's Daniels College of Business as well as the Economics Department through library instruction, collection development, and one-on-one consultations. She coauthored the book *International Business Research: Strategies and Resources*, and has written various chapters and scholarly articles. She obtained her MLS in 1992 from the University of Arizona and MBA in 1990 from New Mexico State University. Esther has been a member of the Special Library Association (SLA) since October 1993. She is currently the chair of the Membership Committee of SLA's Rocky Mountain chapter as well as the Public Relations chair for the SLA Information Technology Division.

Mandy Havert is the Digital Research and Outreach librarian at the University of Notre Dame. She serves as the Notre Dame Libraries' liaison to the Graduate School Professional Development Team. Her efforts focus on connecting graduate students with the resources they need to succeed at the highest levels in their programs. Mandy produces numerous workshops and events targeted particularly to the graduate student population, including the dissertation and thesis camp events and the Hesburgh Libraries Hackathon. She holds an MLS from Indiana University and studied history in her undergraduate work.

Seti Keshmiripour is the head of Access Services at the University of North Texas (UNT) Libraries. She holds an MIS from UNT and has many years of experience working in special and academic libraries. Seti's research interests include user experience, service design, student engagement, and management and leadership.

Deborah Lee is a professor and associate dean for public services for the Mississippi State University (MSU) Libraries. Deborah has served as the coordinator of Graduate Student Service and as the coordinator for Library Instruction Service at MSU. She was the founding associate director of the campus Center for Teaching and Learning and has served as chair of the MSU Promotion and Tenure Committee. Her research has focused on professional development for faculty and graduate students and marketing academic library services. She has a BA in political science and Latin American studies, and an MLS in library and information science from the University of North Carolina at Chapel Hill. She also has an MS and a PhD in business administration from Mississippi State University.

Janet Lee is dean of the library at Regis University in Denver, Colorado. She has a BA and MBA from Regis University and an MA in library science from the University of Denver. She has supported the Corporate Work Study Program at Arrupe Jesuit High School since 2004. As a Returned Peace Corps Volunteer, Ethiopia, she has maintained her ties through library projects. For the 2017–2018 academic year, she was a Fulbright Scholar with the University of Aksum in Aksum, Ethiopia.

Toong Tjiek Liauw (Aditya Nugraha) is an academic librarian at Petra Christian University in Surabaya, Indonesia. His interests include digital repositories, open access, scholarly communication, information infrastructure, digital heritage, libraries and society, library technologies, and library promotion/marketing. He is working on his PhD in information studies at Curtin University in Western Australia under the Endeavour Postgraduate Scholarship from the Australian government and has just submitted his PhD thesis. His undergraduate background in electrical engineering has helped him tremendously in his various library projects involving information and communication technology (ICT). His interest in library and information science (LIS) grew from his experience volunteering—which then led to a part-time job—at his university library during his undergraduate years. He then pursued his MLIS at the University of Illinois at Urbana-Champaign under the Fulbright Scholarship from the U.S. government.

Courtney Lundrigan is the head of Public Services at the John W. Graham Library at Trinity College in the University of Toronto. She is the liaison librarian for international relations, and ethics, society, and law. Courtney is interested in exploring instructional partnerships, both formal and informal, with as many stakeholders as possible. Recently, she has been exploring how to successfully incorporate the *ACRL Framework for Information Literacy in Higher Education* into her instruction programming. She is actively involved with the Ontario Library Association (OLA), where she has acted as a co-planner for the Ontario College and University Library Association (OCULA) stream of the OLA Super Conference.

Paul Mascareñas is a Research and Instruction librarian at Regis University in Denver, Colorado. He received his BA in history from Adams State College and MLS from Emporia State University. His previous positions include interlibrary loan, reference, and distance services. His research interests include first-year experience and information literacy instruction.

Rosan Mitola is the Outreach librarian for the University of Nevada, Las Vegas, where she collaborates with campus groups to integrate library collections and services into co-curricular educational experiences for students. She oversees the Mason Undergraduate Peer Research Coach Program that contributes to student engagement through outreach and peer-assisted learning in library instruction. Her primary research interest is co-curricular contributions to student success. She has presented and published on peer-assisted learning for academic libraries and developing a professional development workshop program for student employees.

Manju Prasad-Rao is an associate professor and head of the Instructional Media Center of the B. Davis Schwartz Memorial Library, Long Island University, LIU Post campus. She holds master's degrees in English from Bangalore University, India, in instructional systems technology from Indiana University, Bloomington, and library and information science from Long Island University. As the exhibits coordinator for the library, she creates many original educational exhibits, coordinates faculty and guest exhibits and programs, and hosts national traveling exhibits. She is the Co-Vice Chairman of Programs for the Phi Delta Kappa Chapter 1524 at Long Island University, and also serves on the American Library Association (ALA) Advisory Committee for their two-year (2017–2019) Institute of Museum and Library Services (IMLS) funded research project, National Impact of Library Public Programs Assessment (NILPPA). This project explores the growing area of library programming and how programs reach library users and impact communities.

Lilly Ramin is the First Year Experience and Instructional Technologies librarian at the University of North Texas (UNT). She also serves as the subject librarian for sociology. Professional interests include outreach to diverse populations and the use of technology in instruction, libraries, and lifelong learning. Lilly is a graduate of the Association of College & Research Libraries Immersion Program for instruction. She was named a 2012 American Library Association (ALA) Emerging Leader. She serves as the chair of ALA Library and Information Technology Association (LITA) Instructional Technologies Interest Group.

Rochelle Smith is the Humanities librarian at the University of Idaho (UI). She was previously the liaison to the College of Natural Resources at UI, and has worked as a forestry librarian and a social sciences librarian at Yale University. A graduate of the University of Pittsburgh, she has also worked as a public librarian in the humanities. As might be clear from this history, she believes deeply in interdisciplinarity and engagement with ideas in all fields of study. Originally from Trinidad and Tobago, she is also a published poet and essayist.

Elia Trucks is an assistant professor and the User Experience and Student Outreach librarian at the University of Denver. She received her MLIS from Florida State University in 2016. She has a passion for helping students achieve their academic and personal goals, furthering social justice and diversity initiatives, and connecting via social media.

Mary Ann Venner is the associate dean for Public Services at the University of North Texas Libraries. She holds an MLS and a BA from the University of North Texas. She has over twenty years of experience working in an academic library setting. Her research interests include information-seeking behaviors, library management, student engagement, and leadership styles.

Sabrina Wong is the Teaching and Outreach librarian at Capilano University Library in North Vancouver (Canada). Before joining Capilano University Library in 2016, she was the Student Engagement librarian at the Southern Alberta Institute of Technology (SAIT), where she worked to create a welcoming library environment for polytechnic students. Her experience also includes working at the University of Calgary as the Outreach and User Experience librarian. Sabrina was selected as an American Library Association Emerging Leader in 2016.