Smarter Together

Collaborative Tablet Communities on Campus and Reference Services Innovation

Linda Salem, Brittany Cronin, and Laurel Bliss

Abstract

In 2011, several reference librarians at San Diego State University wrote a proposal to request iPads for a number of librarians to use to develop services. The result was collaboration between student computing, library administration, the digital technologies librarian, and reference librarians to explore the development of student services. Students' use of mobile technologies was a major factor in the funding of iPads for librarians. Service development for student use required regular community building and collaboration within this library organization. Chapter 3 of Library Technology Reports *(vol. 48, no. 8) "Rethinking Reference and Instruction with Tablets" describes the technology adoption and development process that resulted in the formation of a user tablet community to foster creativity and communication among departments of a traditional library in order to create new services and programs aimed at providing better information services to university library patrons.*

About the Authors

Linda Salem is head of reference services at San Diego State University. She also serves as children's and comparative literature subject bibliographer and as education librarian. She is co-chair of the American Literature Association's Children's Literature Society and is author of *Children's Literature Studies: Cases and Discussions* (Libraries Unlimited, 2004). She is currently curating the Edward Gorey Personal Library.

Brittany Cronin is a reference librarian at San Diego State University, where she is responsible for business administration, economics, finance, and marketing as a bibliographer and business librarian. She has a bachelor's degree in political science from Middlebury College, received her JD from the University of California, Los Angeles, and completed her master's of library and information science at the University of Denver.

Laurel Bliss is the fine arts librarian at San Diego State University, with additional responsibilities in European history, women's studies, and French. She has a master's degree in library science from Southern Connecticut State University and a master's degree in history from the University of Virginia.

Introduction

This chapter describes how several reference librarians at San Diego State University, eager to gain understanding of how students and faculty used tablet computers and how they might develop reference services based on this understanding, started a tablet project group. This chapter includes examples of how, in a short time, the project led to increased communication among librarians and library staff on technology training and to meaningful library participation with the broader campus community in developing tablets into high-quality academic knowledge tools. This chapter explores librarian productivity, mobility tools that patrons use, and limitations in moving from brainstorming ideas to implementation. Readers of this chapter will learn best practices and recommendations for these work areas based on the literature and the findings from the project. Additionally, opportunities for professional development through online courses and conferences are addressed. Overall, this chapter shows how information professionals are smarter when they develop technological expertise together and why this is essential to today's student success.

Rethinking Reference and Instruction with Tablets **Rebecca K. Miller, Carolyn Meier, and Heather Moorefield-Lang, Editors**

17

Library Tablet User Community

The initial project goal was to develop librarians' tablet expertise. The library already had a mobile website, had developed QR codes for way-finding, and was working on an app. The librarians needed to incorporate mobile access devices into daily use to avail themselves of these developments. Further, librarians wanted to join the campus iPad User Group, or IPUG. This group, made up of faculty, staff, and information systems professionals on campus, met monthly to share what they learned about tablets to enhance academic work productivity. This community of scholars expanded teaching and curriculum resources to bring student learning up to date with available resources. The practical teaching enhancements that came from this community of scholars sharing their discipline-specific findings using tablet technology led to a desire for the librarians to make a library tablet community. Members of a library tablet community would have to get tablets. Librarians wrote a proposal to the university library to justify funds for the devices. The proposal emphasized the shift to consumer technology among students in accessing information resources via mobile devices and the importance of librarians remaining abreast of this shift. The proposal was approved, and the reference librarians were issued two iPad 1s and four iPad 2s.

The combination of the influence of growing tablet use on campus and librarian research into tablet use led to the creation of the Library Tablet User Community. The purpose of this group was to encourage the professional development of library employees in tablet technology and to mentor librarians and staff who were not as technologically advanced as others in the basics of tablet computing. Six reference librarians met weekly in self-taught workshops to learn these tools and to brainstorm about services. The director of student computing met with the group to help with the basics and to learn alongside librarians as the group evaluated the quality of mobile resources and considered what evaluation criteria to apply. The word spread in the library about these meetings, and other librarians with tablets wanted to join. As the group expanded, many participants had iPads, and others had Android tablets. This helped keep the conversations more focused on broader tablet issues and less on platform-specific matters.

The collaborative tablet meeting in the library community continued to grow and eventually included library faculty, staff, and administrators. This provided a unique mix of viewpoints, backgrounds, and job duties that helped to inspire a more creative environment. The group was open to anyone in the library who was interested in learning more about developing skills and library applications for tablets and included members with a wide range of technical

ability, comfort, and knowledge. This created a safe environment where group members could ask questions and be taught in a close learning community. The different nature of the individual members' daily work responsibilities opened up discussions about creating solutions and rethinking the way that technology and tablets could help move the group forward.

Meetings took place outside the library, where members could share experiences and observations over coffee and away from typical workspaces. This promoted a more casual, drop-in environment rather than one where attendance was strictly regulated. Furthermore, there was no expectation that discussions had to focus solely on academic uses of tablet technology. In fact, many times a member started to discuss a nonacademic app only to spark creative uses for potentially integrating it into a more traditional library function of reference, instruction, or information management. The group found that personal recommendations and reviews were extremely important as these were based on recent practical use.

Creativity, critical thinking, and imagination guided the group's brainstorming about implementation scenarios for offering library services using tablets. There was rapid-fire discussion about how technical access, search and discovery designs, computing support, digital production, collection budgets, and research knowledge bases all worked together. These questions and conversations dissolved traditional departmental lines in the library organization. Experts from each area at the table created a team that could specifically identify an academic library goal and determine ways to meet that goal and a team that could immediately determine the feasibility of various implementation scenarios. Participants left the group each week inspired by ideas to experiment with on their own or to share with their colleagues outside the group.

The group identified the following tips for making meetings educational and collaborative:

- Maintain an informal, drop-in atmosphere.
- Meet outside the library.
- Have round-robin discussions.
- Focus on brainstorming, not implementation.
- Include library faculty, staff, and administrators, and be open to anyone who is interested.
- Encourage all levels of knowledge and comfort.

Impact of Community

In the tablet group's weekly meetings, librarians found themselves focusing on ways to connect the benefits of tablets in their own productivity and creativity back to their users—students and their teaching faculty. Some

students and faculty owned tablets, but even more had smart mobile phones, which they carried around campus. A study released by EDUCAUSE Center for Applied Research in 2011 found that "students have a clear preference for smart, mobile devices (nearly nine in 10 students own laptops, more than half own smartphones, and one in 10 owns an iPad or other tablet)."[1] Further, "a majority of students own a laptop (87 percent), a USB thumb drive (70 percent), an iPod (62 percent), a smartphone (55 percent), a digital camera (55 percent), and a webcam (55 percent). . . . In addition, 57 percent of all students use e-books or e-textbooks, which lend themselves to these devices."[2]

EDUCAUSE found that students often turn to their mobile devices, and in particular to their smartphones, for a variety of educational purposes. According to responses from 3,000 college students from 1,179 colleges and universities, 66 percent use their mobile device to e-mail professors, 62 percent check grades, 61 percent text other students about course work, 59 percent look up information on the Internet outside of class, 28 percent collect data for class work, 24 percent access library resources, 22 percent conduct research for papers or presentations, and 15 percent use their mobile phones as a source of additional help or tutoring, in addition to the many other ways that students gave for how they use their smart mobile phones for academic purposes.[3] In the context of the library tablet group, it was important to recognize that far fewer students owned tablet devices than owned smart mobile phones or computers.[4] Learning about how students use mobile technology forced the group to consider the relevance of the tools with which they experimented. The group explored how to enhance students' library learning experiences based on what tools students really used. Student questions, both in person at the reference desk and virtually through a text reference service, revolved around mobile access to library materials.

One essential component in forming a successful library tablet community was to include the digital technologies librarian, who worked on the mobile interface, and the director of student computing, who worked with students daily to solve access problems. Ongoing participation by these colleagues in tablet community meetings allowed reference librarians to focus on ways to use tablet technology to reach and enhance student learning. These colleagues' perspectives about the student services they offered made the group more effective at solving problems for students using mobile technology. In discussions about patron-centered services, the group talked about how they could best make use of existing mobile services, for example, the library's mobile website, and how to better inform the development of future mobile services in a way that included librarians' input about student research needs. One conclusion drawn from this exercise was similar to Joan Lippincott's sentiment:

> Librarians can teach students about the availability of access to information from their mobile devices in the field, to support research. They can assist students in learning about software to organize their information on their smartphones or how to develop mash-ups using geographic applications and other information resources. . . . This requires an awareness of innovative assignments, outreach to faculty, and the skills to teach these technologies.[5]

The very existence of the tablet group and the supportive learning environment it provided allowed librarians who participated in this group to sharpen their technical skills. It also raised librarians' comfort level and confidence when talking with students at the reference desk and in reference interviews about mobile learning apps, resources, and access topics and referring them to campus experts on academic tablet use. Librarians could take better advantage of teachable moments to promote the availability of useful mobile information resources offered by the library.

Challenges and Limitations

The tablet group encountered limitations in developing change through tablets. At their core, tablets are personal computing tools. Each member at the tablet meeting used his or her tablet on an individual level, which affected everything from what app they chose for a certain function to how they saw tablets impacting future services. Because of this, the group struggled with the need to acknowledge individual styles of use while developing standardized services for broader audiences. The group learned from this experience that there is a disconnect between what works for traditional library service development and what works for people using such individualized learning equipment and that future library service development must address this in the mobile context. A new type of service development along these lines may require rethinking the library's overall mission with a focus on cross-campus collaborative goals.

In thinking about this issue, the members acknowledged that the library, like many academic libraries, serves a diverse group of information users. This diversity is expressed through a wide range of literacy skills and abilities in terms of language, information literacy, and technical skills. This created challenges when members wanted to move from brainstorming to implementation. Certain populations of students needed to learn basic library skills. These included searching the catalog, understanding library organization, and learning how to think critically about

Rethinking Reference and Instruction with Tablets **Rebecca K. Miller, Carolyn Meier, and Heather Moorefield-Lang, Editors**

19

Library Technology Reports   alatechsource.org   November/December 2012

information. It was hard to imagine creating a new mobile service or innovative use of tablet technology that could be relevant at once to the entirety of our population regardless of where they were on the information literacy spectrum. The inherent goal, therefore, was to develop tablet literacy and mobile literacy in researchers so that they could take advantage of its information power.

In addition to data on student mobile device use in general, it was important for the group to recognize that far fewer students owned a tablet device than owned a smart mobile phone or computer. According to EDUCAUSE, only "11 percent own a netbook or an iPad (8 percent) or another tablet (2 percent)."[6] Accepting these limitations pushed the group to shift its perspective and to talk about ways to improve library services and access not just in terms of tablets but on a broader mobile level and to focus discussions on innovations for both traditional and nontraditional library services to reach all library users.

Trying to anticipate the development of mobile technologies was at once a delight and a frustration. Just trying to stay on top of the changing landscape of apps, functions, software, and hardware issues in our tablet group was challenging. In the course of its meetings, the group came across a number of professional development opportunities surrounding the use of personal tablets in the library setting. For instance, there were a number of online courses that provided many of the benefits of the tablet group. These courses focused on becoming familiar with the available technology and functionality of tablets and smart mobile devices. They provided inexpensive ways to gain the skills necessary to use emerging tablet technologies and gave participants a place to share ideas and collaborate on creative ways to use tablets within different library environments.

College and university computer science departments were another key provider of mobile technology instruction and offered courses with titles such as "iPad/iPhone Mobile Application Development" or "Emerging Web and Mobile Technologies" in support of certification in Web and mobile apps development. Interestingly, there tended to be very little about enterprise-level design and management included in the content of these apps certificate courses, which was the very content the group focused on. It was also unclear the amount of teamwork that happened in college courses, whereas the group really functioned as an entrepreneurial think tank that explored ideas to develop further.

Aside from classes, there were also a number of conferences that were helpful. The Handheld Librarian Online Conference represented just one of the many affordable options for development that focused on the use of technology in libraries and was designed to be a very collaborative learning environment, where participants were encouraged to contribute ideas and information. Conference organizers called it "professional development for librarians by librarians."[7] Another conference with a focus on innovative technology, information, and libraries was the Internet Librarian Conference. Organizers described the 2012 conference as "the most comprehensive conference for library and information professionals interested in technology to discover the insights, strategies and practices that will allow us to tame the net, manage libraries and digital information, and enhance the information and learning experience of people in our communities."[8] These and other conferences focused on the connection between new technologies, libraries, and information, and they provided excellent opportunities for librarians to improve their skills and knowledge surrounding tablet technologies. They offered opportunities for librarians to network and collaborate on innovations about how to use these devices to improve traditional and nontraditional library services.

Conclusion

The Library Tablet User Community at San Diego State succeeded on many levels. It created a collaborative learning environment that encouraged participation from varying work areas and levels within the library. The collaboration allowed participants to drastically increase their skills and comfort level working with tablet technology. Furthermore, it brought different groups within the library together in dialogue on the use of tablet technology to improve patrons' library experience and to enhance student learning.

The group's next steps were to move ideas about providing reference, instruction, and other services into the feasibility-testing phase and possibly into the implementation phase. Once focused on one or two smaller projects, the group would implement these projects and see them expand to the entire library and, more broadly, to the entire campus. Even so, members had to acknowledge that projects had workload implications that were beyond the scope of the librarians who started this project. Thus, the participation of library administrators in the community was essential. It benefitted the library as a whole as administrators must grapple with the needs that are expressed by students, librarians, and computing center leadership and balance these needs with existing resources to fund them.

One solution may be through cross-campus partnerships, knowing that, if the goal is to create campuswide technology initiatives, it is helpful to look outside the library and include multiple perspectives and disciplines to create programs aimed at producing "mobile technologies—which move the potential

Library Technology Reports   alatechsource.org   November/December 2012

20

Rethinking Reference and Instruction with Tablets   **Rebecca K. Miller, Carolyn Meier, and Heather Moorefield-Lang, Editors**

of technology outside the classroom and build links among disciplines—[creating] a broad cross-disciplinary approach and empower[ing] it."[9] The experiences of working in the tablet group showed that "it is difficult to develop an appropriate workflow for mobile learning in academic libraries, mostly because the technology is advancing so quickly it is hard to pin point what will work and what will fade."[10] In order to avoid this potential downfall, members wanted to identify manageable projects and then work towards implementation as quickly as possible.

The group acknowledged—both from experiences each week and with attention to the fact that many of the library's patrons do not yet own tablets but have mobile phones—that although mobile devices may not be best used for a "number of scholarly research activities," there is room for a number of traditional library services to "be adapted or created to take advantage of devices that are always on, have a small screen and a challenging input device, and are increasingly location aware."[11] The group considered that to address this adaptation of services to personalized devices, library administrators could add to their organizational structures a flexible, empowered team, responsible for providing the optimal user experience design for mobile environments. Such a team would implement simple solutions that would customize library web services for use with handheld devices that are increasingly users' preferred research tools. Understanding the group's limitations helped members focus on areas for potential implementation. The end result was the creation of a thriving library tablet community that increased communication, collegiality, and creativity and cultivated skill sets, needs assessment, interest, and momentum. As a result, the tablet group could

implement innovative technology-based information services that would better serve the patrons of San Diego State University Library and would increase the potential to create programs or services that affected the broader campus.

Notes

1. Eden Dahlstrom, Tom de Boor, Peter Grunwald, and Martha Vockley, *The ECAR National Study of Undergraduate Students and Information Technology, 2011,* ECAR Research Report (Boulder, CO: EDUCAUSE Center for Applied Research, October 2011), 4, http://net.educause.edu/ir/library/pdf/ERS1103/ERS1103W.pdf.
2. Ibid., 7.
3. Ibid., 15.
4. Ibid.
5. Joan K. Lippincott, "A Mobile Future for Academic Libraries," *Reference Services Review* 38, no. 2 (2010): 210.
6. Dahlstrom et al., *ECAR National Study,* 7.
7. "Mobile Solutions for Libraries That Work!" Handheld Librarian 7 Online Conference, accessed September 14, 2012, www.handheldlibrarian.org.
8. "Internet Librarian 2012: Transformational Power of Internet Librarians: Promise & Prospect," Information Today, accessed September 14, 2012, http://infotoday.com/il2012.
9. Mary Grush, "Across the Disciplines: 5 Strategies for Success," Mobile Learning Roundtable, *Campus Technology* 22, no. 11 (November 2009): 26.
10. Michelle Leigh Jacobs, "Libraries and the Mobile Revolution: Remediation = Relevance," *Reference Services Review* 37, no. 3 (2009): 289.
11. Sally Wilson and Graham McCarthy, "The Mobile University: From the Library to the Campus," *Reference Services Review* 38, no. 2 (2010): 214.

Library Technology Reports   alatechsource.org   November/December 2012

Rethinking Reference and Instruction with Tablets   **Rebecca K. Miller, Carolyn Meier, and Heather Moorefield-Lang, Editors**   **21**