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The Wireless Library: An Assessment of a Library Laptop Program

Arthur Gutierrez, Jr.
Emporia State University
Emporia, Kansas

Terri Pedersen Summey
Emporia State University
Emporia, Kansas

Abstract

Approximately five years ago, the library at Emporia State University started a laptop checkout program to provide laptops for students and faculty members to checkout and use while they are in the library. The program has been highly successful with students often waiting in line to be able to check out a laptop. In 2009, the library purchased eight Netbooks to see how they would be received by the individuals using the laptop checkout program. With the beginning of the Fall 2010 semester, some modifications were made to the laptop checkout program including reducing the fines for late returns and extending the checkout period. Because the program has been in place for some time, the librarians at the Emporia State University Libraries would like to assess the program by surveying the individuals that check out laptops from the library. In this article, the authors will explore laptop programs in a variety of library settings, present details on the ESU Libraries Laptop Checkout program, discuss the survey results, present what the library faculty and staff have learned, and potential future modifications to the program.

Libraries have become centers for research, teaching, learning and socializing, and the ESU William Allen White Library is not an exception to that rule. Serving the university population of about 6,500, the WAW Library is the main library on the campus of Emporia State University and has proven to be a popular place for students to study, do library research and just hang out. As a result of more information available in an electronic format, each year the demand for computing resources in the library has increased. The WAW Library has centralized the computers and a computerized classroom for public use on the second floor of the library or the Information and Instruction area. To assist student access to computing resources, the WAW Library was one of the first buildings on campus to provide wireless access to the campus network throughout the building.

In order to increase the amount of computers available for student use, and to enable students to be more mobile throughout the building, in 2005 the WAW Library purchased five laptop computers and started a Laptop Lending program. Since that time, the amount of laptops available for checkout has increased to around forty laptops, plus peripherals such as powercords, mice and headphones. Although the perception of library faculty and staff members is that the laptop lending program is extremely popular, the library had not done any type of assessment of the program. The perception of the library faculty and staff is mainly based on the fact that several times a week, the library will completely run out of laptops to checkout. Library faculty had examined circulation statistics but this would only show the circulation activity, including renewals of the resources. In the past three years, the circulation of laptops rose from 23,174 in 2007 to 38,606 in the past year. The percentage of laptop circulation has gone from 36 percent of all circulation transactions to almost 50 percent (see figure 1). To help discover student opinion about the laptop circulation program, two library faculty members decided to more formally assess the laptop program by surveying the students that had signed laptop agreements on file with the Access Services Department.

Literature Review

There are a variety of articles published in the literature that discuss laptop lending programs in libraries. Many discuss their own experiences with a laptop lending program (Atlas, Garza & Hinshaw, 2007; DiRenzo, 2002; Dugan, 2001; Feldman, Wess, & Moothart, 2008; Hsieh & Holden, 2008; Jensen, 2007; Lyle, 1999; McAdoo & Tease, 1998; Power, 2008; Sharpe, 2009). To get an idea of the different libraries providing laptops to their customers, Holden and Hsieh (2007), provide an overview of laptop lending programs in United States academic libraries. They discovered that 79 percent of the libraries that responded to their survey checked out laptops to their customers. A similar survey conducted about the same time found that seventy percent of the institutions that responded to their survey had a laptop lending program (Barnett-Ellis & Charnigo, 2005).

Many of the articles discuss the implementation stages that libraries undertook to begin a laptop program and their policies and procedures (DiRenzo, 2002; Lyle, 1999; Power, 2008). Holden and Deng (2005) took a unique approach in their research and presented information on a survey that they conducted prior to beginning a laptop lending program.

The surveys and methods utilized by those that had previously assessed their laptop lending programs were of the most interest and were used to create the instrument used in this study. Hsieh and Holden (2008) asked their library laptop users about awareness of the laptop lending program, whether or not respondents owned their own laptop and awareness of wireless connectivity and desk top computers in the library. In the survey concerning a laptop lending program in a medical library, Atlas, Garza and Hinshaw (2007) provided examples of the variety of uses that a library laptop borrower may employ when borrowing a library laptop. And finally, Feldmann, Wess, and Moothart (2008) asked questions about laptop use versus desktop use on their survey along with inquiring about their respondents' satisfaction with the library laptop lending program. All of these articles provided valuable information for the librarians at Emporia State University. Although the researchers had determined what questions they wanted to ask, examining previous surveys helped to provide further ideas useful in developing the survey that was to be used at Emporia State University.

Laptop Lending Program at Emporia State University

The laptop program at Emporia State University Libraries and Archives began in 2006. The program started with 5 laptops and 8 wireless access points. The ESU Libraries and Archives initially began the program as a pilot project to see if a laptop lending program would be successful and eagerly received by the student population that used the library. Because the checkout statistics for the laptop lending program have steadily increased each year, the Library has been adding on average ten laptops per year. To save cost on laptop purchases and to try out the smaller mini laptops, ten Netbooks were added to the laptop collection in March of 2010. Currently the White Library has thirty laptops and ten Netbooks available for checkout in the laptop lending program.

Research Methodology

To assess the Laptop Lending program at Emporia State University, a decision was made to survey students that have participated in the program. The survey was created using Zoomerang and contained approximately thirty questions including demographic questions, questions asking about a student's knowledge of the Laptop Lending program, and questions about laptop use. The survey was deployed through a link on the desktops of the laptops in October 2010. Information about the survey was shared with the students. A series of three emails was sent out to the 750 students that were identified as being current students that had a laptop agreement on file with the library.

Survey Results and Analysis

The survey was deployed for three weeks during the month of October 2010 and when it was concluded 190 students had responded to the survey. The first part of the survey asked questions about personal characteristics. One interesting finding was that eighty three percent of the respondents live off campus with only seventeen percent indicating that they live on campus. Because of recent remodeling efforts in the library and a lack of other facilities on campus where groups of students can gather, the library has become a gathering and social place, along with a place for research, computer use and studying. Students that live on campus have a place to do these things and students that live off campus need a place to gather, socialize and study. One surprising result was that seventy nine percent of the respondents indicated that they own a wireless enabled laptop computer and ninety five percent of the respondents answered that they knew that they could use a wireless enabled laptop in the library.

The next series of questions asked about the use of library laptops. Fifty percent of the respondents said that they only used the laptops less than once a week. Only six percent responded that they used the laptops daily, twelve percent four to six times a week, and thirty two percent said that they checked them out one to three times a week. Most of the students responding to the survey, ninety three percent, were aware that the library had computers on the second floor of the library.

The next question asked students how they used the laptops that they checked out in the library. The top use was to complete an assignment followed by using Blackboard, the course management system used by the university, using email, connecting to the Internet and library or online research. The list of uses and number of respondents are presented in Figure 3. When asked "why they use the library laptops over the library PCs", the majority of the responses were that they could take the laptops anywhere, respondents could take it where it is quiet, and the laptops provide an alternative when all of the library desktops are busy. Other responses were that the library laptops were more convenient and the other floors in the library were preferred over the second floor.

One of the reasons behind the survey was to discover whether or not the students liked the new Netbooks that were purchased during the last year. Of those responding to the survey, seventy percent have used the Netbooks and of those that have used the Netbooks, forty four percent liked using them. Although this information may influence how many more Netbooks the library may purchase in the future, because of potential cost savings and the ability to purchase more laptops, it does not seem significant

enough to stop purchasing Netbooks altogether. When respondents were asked about their satisfaction with the laptop lending service and the laptops themselves, the majority responded that they were either satisfied or very satisfied with most of the students experiencing problems only sometimes or just a few times and thirty seven percent of the respondents said that they have never experienced problems with the laptops.

Overwhelmingly the answers received to the question, "What do you like about the library laptop lending program" referred to the convenience that the laptop program affords students at ESU. Just over twenty five percent of the responses actually have the word "convenience" in them. The conveniences the students cited include ease of checking out laptops, ability to print from the laptops, ability to do group work, ability to move around the library and not having to carry personal laptops to campus. Other surveys have similar results such as Holden and Hsieh reporting that "students welcomed the laptop service for its convenience, ease of use, network reliability and mobility", all traits that were echoed by students in our survey (2007).

Other reasons for liking the laptop lending program mentioned by respondents included that it was free, laptops were available when all other computers in library were in use and gave them an alternative when their personal computer was not working. As noted by survey responses the library laptop users find the traditional desktop computers to be very limiting and also the library electronic classroom to be a bit crowded and noisy for contemplative work. These results are comparable to those received in a similar survey done at Colorado State University published in 2008. (Feldmann, Wess, and Moothart p22).

The responses received for a question regarding how the laptop lending program could be improved were broken down into nine categories. Thirty-six percent of the respondents indicated that they were happy with the program and did not recommend any changes. Seventeen percent of users wanted a longer loan period and fifteen percent wanted to be able to use the laptops outside the library. Through the literature review and our own research we have found the most common loan period for outside library use is 3 days. Holden and Hsieh (2008) found in their study that 70 percent of students that owned laptops reported never taking them to class. The students cited weight of the laptop and risk of thefts as reasons for not bringing their laptops to campus. (2007).

Other answers included newer laptops, more electrical outlets, cleaner laptops, more laptops, improved maintenance, and better connectivity. This broad range of responses to the question about improving the program provides the library a good idea of where to start improving the existing program by focusing on the categories with the top responses. One finding was that overall connectivity is not a big issue and the library faculty and staff can instead focus on improvements in other areas.

A variety of responses were also received for the question, "How has the library laptop program helped you at ESU?" Eighty-six percent of the responses stated the laptop program helped them complete their schoolwork. The high level of responses supports the hypothesis that the laptop program is helping students at ESU succeed. The second highest response to survey question 28 is that the laptops helped students when all desktops were in use. This response while not overwhelming provides an impetus for the library administration to look at the ratio of desktops to laptops available for students and also consider if it is time to increase the number of desktops available in the library or if an investment should be made in more laptops. Six percent said having laptops available in the library saved them from having to carry their own laptop to classes.

For a question that inquired about the impact if White Library did not have a laptop lending program the responses were analyzed and separated into four categories. The theme that dominated category one with sixty-six responses is the students would either discontinue using the library or greatly reduce their use of the library. The theme of the second highest responses at 28 percent is the lack of a library program would negatively affect their ability to complete coursework.

Thirty-two percent of the responses stated the impact of not having a library laptop program would be minimal for them. Also a point of interest is that those libraries that have a library laptop program that

later offer wireless access for user's personal laptops find that use of the library laptops in most cases goes up (Holden and Hsieh). Another surprising fact highlighted by Holden and Hsieh that has also been noted at ESU was that a high percentage of laptop ownership among students, and in the case of this survey was 80 percent of survey respondents, did not decrease the need for a library laptop program. In fact, one of the responses Holden and Hsieh, received was from a library on a campus that required all students to have a laptop and they reported high use and popularity of their library laptop program (267).

In addition to the benefits for students we must also consider benefits to the institution, DiRenzo has found at the University of Akron there are institutional benefits of wireless programs such as reduction in wiring costs, reduction of space devoted to labs, resulting in an increase of available office and classroom space.

Conclusion

Four main goals provided the impetus for the survey: who was using the laptops, how were the laptops being used, were students satisfied with the laptop lending program and did students like the new Netbooks that the library purchased in the last year. Through the survey, characteristics of the laptop users were discovered. One of the purposes to conducting the library laptop survey was to determine whether or not the program was successful. After analyzing the responses, it seems that the library laptop lending program is not only successful, but that the students are satisfied with the laptops. One question regarded the satisfaction with the Netbooks that the library purchased. As mentioned earlier, the results are probably not high enough to deter the library from purchasing more Netbooks. Since the library can purchase two Netbooks for the price of one full-size laptop, the library will probably purchase a combination of Netbooks and full-size laptops. And to answer the question of how students are utilizing the laptops, it was good to know that many of the students are using the laptops for coursework and research foremost and less are using the laptops for recreational uses.

The analysis of the responses to the qualitative questions points out there are some areas can be improved upon but overall the students are happy with the library laptop program and feel that it is a factor in their being able to complete coursework. Overall the laptop lending program removes barriers to increase student success. The findings also emphasize library as a place, a place that offers a welcoming learning atmosphere.

References

- Atlas, M.C., Garza, F. & Hinshaw, R. (2007). Use of laptop computers in an academic medical library. *Medical Reference Services Quarterly*, 26:2, 27-36. DOI: 10.1300/J115v26n02_03.
- Barnett-Ellis, P. & Charnigo, L. (2005). Wireless networks in medium-sized academic libraries: a national survey. *Information Technology and Libraries*, 24:1, 13-21.
- Di Renzo, S. (2002). A wireless laptop-lending program: The University of Akron experience. *Technical Services Quarterly*, 20:2, 1-12. DOI: 10.1300/J124v20n02_01.
- Dugan, R. E. (2001). Managing laptops and the wireless network at the Mildred F. Sawyer Library. *The Journal of Academic Librarianship*, 27:4, 295-298.
- Emporia State University. (2010). *About ESU on the Emporia State University website*. Retrieved from <http://www.emporia.edu/info/about/>.
- Feldmann, L., Wess, L., & Moothart, T. (2008). An assessment of student satisfaction with a circulating laptop service. *Information Technology and Libraries*, 27:2, 20-25.
- Holden, H. & Deng, M. (2005). Taking pro-action: A survey of potential users before the availability of wireless access and the implementation of a wireless notebook computer lending program in an academic library. *Library Hi Tech*, 23:4, 561-575. DOI: 10.1108/07378830510636346.
- Holden, H. & Hsieh, M. L. (2007). The state of wireless laptop lending programs: a survey of academic libraries. *Library Hi Tech*, 25:2, 260-275. DOI: 10.1108/07378830710755018.

- Hsieh, M. L. & Holden, H. (2008). A university library laptop lending service: An analysis using two student surveys. *Library Hi Tech*, 26:3, 424-439. DOI: 10.1108/07378830810903346.
- Jensen, K. (2007). Beyond "classroom" technology: The equipment circulation program at Rasmuson Library, University of Alaska Fairbanks. *Journal of Access Services*, 5:1, 221-231. DOI: 10.1080/15367960802198770.
- Lyle, H. (1999). Circulating laptop computers at West Virginia University. *Information Outlook*, 3:11, 30+. Retrieved from Academic OneFile. Web. 21 July 2010.
- McAdoo, M. L. & Tease, J. (1998). The Mansfield protocol for laptop computer circulation: How a library can provide its own technical support. *College & Research Libraries News*, 59:7, 507-8.
- Power, J. L. (2008). Circulation on the go: Implementing wireless laptop circulation in a state university academic library. *Journal of Access Services*, 5:1, 197-209. DOI: 10.1080/15367960802198754.
- Sharpe, P. A. (2009). Circulating laptops: Lessons learned in an academic library. *Journal of Access Services*, 6, 337-345. DOI: 10.1080/15367960902894195.

Art Gutierrez is the Head of Technical Services at the Emporia State University Libraries and Archives, Emporia, Kansas.

Terri Pedersen Summey is the Head of Access and Children's Services at the Emporia State University Libraries and Archives, Emporia, Kansas.

Figure 1:

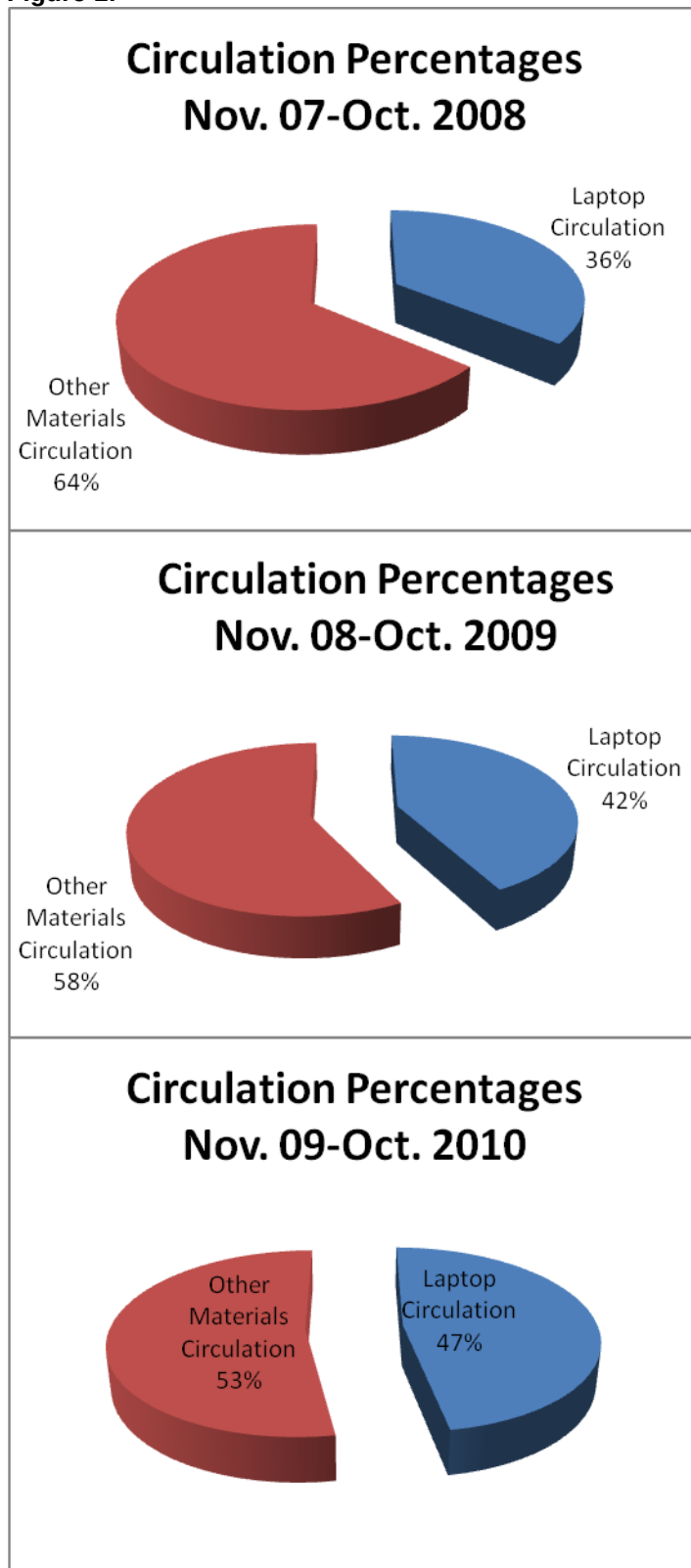


Figure 2: Table of Laptop Programs (Libraries of Kansas Regent's Universities)

Kansas Regent's Universities	ESU	KSU	KU	WSU	FHSU	PSU	Washburn
Laptop Program	x	x	x	x	x		x
Laptops Available	40	12	46	10	23	na	25
Library Use Only	x		x	x		na	X
Loan Period	3 hours	3 days	4 hours	3 hours	3 days	na	2 hours
Fines	\$5/hour	\$5/day up to \$35	.25/min up to \$60	.25/min up to \$120	\$5/hour up to \$30	na	\$20/ hour

Figure 3: Laptop Usage

