Preface

The growth of the Internet over the past 20 years changed the way library materials are accessed. Gone are the days of the card catalog, print indexes, and making copies of articles available only in print. Remote access to library materials is the norm rather than the exception in 2012. A major factor for remote access was the growth of distance education courses and programs. What may have started out as a small portion of library services in academic libraries has increased in size and scope of services offered. Books and sometimes articles may be mailed to students who live off-campus; all campuses offer some type of remote access to their library resources. As more students enroll in online courses or programs at both for-profit and traditional colleges and universities the need for services and remote access to library resources increases. Remote access is not just limited to off-campus students. All students on or off-campus can access library resources through a remote connection. Some of the services available to students include chat reference, access to databases, virtual libraries, and the library catalog. A student working on a paper at two o’clock in the morning can now look for articles in one of the library’s databases or check the catalog for books. The library is available to students 24 hours a day, seven days a week, regardless of whether or not the physical building is open. It is the growth and improvement of technology that has made all this possible.

Some of the first databases available required a mediated search with the reference librarian. Other databases and information were available on CD and had to be installed on a computer. As HTML became the standard language for the Internet database, vendors were able to provide content to libraries in either HTML full text or PDF (portable document format). Students could then print the articles while in the library. By the end of the 1990s virtual private networks (VPN) made it possible for remote connection to another location. The development of VPN and another technology, EZproxy in 1999, allowed students access to library resources from off-campus locations. EZproxy allowed libraries to create a password-protected environment that would authenticate students, faculty, or staff and provide them with access to library materials. As a new decade takes off, one can expect to see increased growth of mobile technologies from libraries and database vendors to improve remote access to their resources.

The ability to gain access to library materials on or off-campus brought about some problems for academic libraries. The primary one is copyright protection. Georgia State University in Atlanta was sued by Cambridge University Press, Oxford University Press, and SAGE Publications for copyright and fair use violations. The publishers claimed the university through the use of e-reserves or electronic reserves violated fair use because students or faculty members could print out multiple copies of the item or post them to a faculty website. As of the fall of 2011, the outcome of the case was still pending.

Today’s library users want and need remote access to library resources 24 hours a day, and library managers and administrators want to ensure their users have access to library resources when they want
and need them. This book is intended for library users and managers to gain a better understanding of remote access technologies currently available. So who are today’s library users and managers? Library users can be students working individually or in a group on a research project. Faculty and staff need remote access to library resources. A faculty member could be writing a book or article and need to search the catalog or databases to find the information they need for their project. A staff member could be taking a class or need to obtain information for a project at work. Alumni of the school might want to find an old yearbook or photo from the year they graduated. It could be a community user or it could be a member of the “friends of the library” group who need to access library resources from home to find a book or article. You could also have one-time or first-time users visiting the library’s website to find resources for a project. Visiting scholars are another group of library users and usually have remote access to library resources the same as faculty, staff, and students. All of these users need remote access to library resources to develop course content or to research a topic for a project. Some of the users might be technology savvy and able to navigate the library website and databases without any problems or the users might not be so technology savvy and require help from a librarian to understand how to access library resources while off-campus.

Library managers likewise can fall into anyone of a number of categories. They can be paraprofessional supervisors or professional librarians. Paraprofessionals, just like professional staff, need to know how users can obtain remote access to library resources. Managers, whether they are professional librarians or paraprofessionals, will often help users obtain the remote access they need to library resources. Managers and professional staff might lead focus groups or develop surveys to understand how users access library resources and how the library can improve access to its resources. It could be the manager for Interlibrary Loan or the Head of Access Services who need a better of understanding of how they can improve their services to users. Improving remote access services increases the library’s role in the academic community and makes the library the prominent component of the academic life of the university.

CURRENT AND FUTURE TRENDS FOR REMOTE ACCESS

Technology changes rapidly, and new technologies will provide better access to library materials. Libraries will need to determine what technologies to adopt and how to stay up to date with new and emerging one. Some of the current trends and issues to explore regarding remote access to library collections include the following:

• Identifying new technologies
• The ability to implement and update new technologies
• Understanding copyright and fair use laws
• Creating metadata for access to digital collections
• Meeting user needs

Since the 2007 launch of the Kindle e-book reader, there have been a growing number of new products designed to access information from any location with Internet access. These include, but are not limited to, smartphones, the iPad2, iPod Touch, and netbooks. Smartphones and the Apple products all have a number of applications (or apps) that can be purchased or downloaded to access information for research or for entertainment. In early 2011 EBSCO launched a mobile application for access to their
databases such as Academic Search Premier, Cinahl, and others. Other database vendors including Gale, ProQuest, and Elsevier, have developed and launched similar apps for their products. Their websites provide information on how to install and use their mobile apps. An issue related to mobile technologies is that some websites are not fully functional when accessed from mobile devices, or the Information Technology infrastructure may not be in place to provide access to information through a mobile device. This becomes a source of major frustration for users.

Determining which technologies to implement should be a direct result of the feedback from library users. There are a variety of ways to determine user needs, including focus groups, surveys, student advisory committees and user comment or suggestion cards provided by the library at their public service desks. The biggest mistake an organization can make is to not ask for user input before implementing a new service, or in this case, a new technology. One should never assume they know what the user wants and adopt a new technology only because everyone is talking about it. You might implement a new technology only to find out six months later there are a number of problems with it or it is too difficult for users to get used to it. It is also necessary to solicit feedback from library users about current services before implementing new ones. The feedback obtained from surveys or focus groups can be used by the library to develop or change their strategic plan.

Copyright laws govern fair use of any and all printed materials. Remote access to library collections allows students and faculty to gain access not only to databases but also to electronic reserves for classes. In addition to electronic reserves, materials can also be embedded into an online class through course management software, such as Blackboard/WebCT, Sakai, or Moodle. Electronic reserves and course management software require user passwords, but do not limit the number of copies you can make or distribute nor does it prevent you from sharing the link to an article or other copyrighted material with other outside of the class. It is an issue universities need to address through their policies regarding fair use of copyrighted material.

Metadata is the information that helps you find information in a database or other online resource. Without metadata you could not find information in a catalog, database or the Internet. The use of metadata provides the keywords, title, author’s name, and other relevant information that allows you to find the information you need and to refine your search through additional search terms or metadata. It is the use of metadata that brings order to chaos. In a recently published article, the author indicated how Google uses metadata in several of its advanced search products (Beall 2010). The use of metadata in Google’s advanced search options allows users to refine their searches to yield better results.

THE FUTURE OF REMOTE ACCESS

As the use of technology becomes more pervasive in society, it will become necessary for libraries to adapt to meet the needs of their users. Websites and databases will have to be compatible with mobile devices. Database producers will need to create mobile apps allowing users to access their information whether they are at home, in the library, or sitting in the local coffee house. As social networks gain in popularity, libraries will need to explore their potential for providing remote access to their materials. While they might not be able to place copyrighted materials on a social networking page, they can provide links to catalogs or tutorials on how to access materials. It may be possible to place a link to their databases that could link to EZproxy to verify the users’ ability to access the libraries online materials. Another example of remote access is subject guides created with LibGuides. This product from
Springshare allows libraries to create subject guides and embed links to their catalogs and databases within those subject guides. Faculty and students then have the ability to gain access to library resources through the course subject guides.

Two additional sources for remote access include open access journals and digital repositories. Open access journals are digital literature put online free of charge and most licensing and copyright restrictions (Suber 2010). The Public Library of Science (PLoS) was one of the first open access scientific journals, and it uses a publication model requiring authors to pay production costs upfront so the information can be accessed free of charge (Suber 2010). Open access journals will never replace the scholarly journals published by the academic presses, but they do provide access to information, especially in the sciences and medicine, which may not be available to the general public without the open access initiative. The Directory of Open Access Journals provides links to open access journals grouped by categories. According to their website, there are now over 5400 open access journals available. Open access journals provide researchers with the opportunity to find peer reviewed articles without being affiliated with a college or university. As the cost of journals continues to rise, open access journals and the open access initiative may gain support from librarians and researchers.

One of the first digital repositories was a joint effort between the Massachusetts Institute of Technology and Hewlett-Packard, called DSpace (http://www.dspace.org/#). This open source software allows colleges and universities to preserve, manage, provide access to, and share their materials. The software allows colleges and universities to share documents, such as conference papers, video collections, and images. If one searches Google Scholar, you will find material from many large colleges and universities stored as PDF documents on the institution’s digital repository. This provides researchers both on and off campus to access the digital repository without a password and opens up a world of scholarship that previously was not shared beyond a scholar’s institution or a conference.

With the growth of social networks many libraries created a Facebook page, but the question arises: do students really want libraries on Facebook? Or to put it differently, how can libraries use social networks to meet the needs of their students? With half a billion users, Facebook certainly has the potential to reach almost every student on campus. Another option is Twitter, where users create an account and post what is happening in their world in 140 characters or less. The past two years, the American Library Association has provided Twitter feeds to some of their conference sessions. Feedback from ALA conference attendees has been very positive. They like the option of Twitter feeds and use Twitter to communicate with colleagues and follow conference sessions and events. Can this type of social network be used to provide remote access to library collections? Social media provides libraries with the opportunity to keep their students updated about new resources but to also interact with them by providing links to resources in places they work. Group work no longer has to take place in the library. Social media provide students with the ability to work remotely through Facebook, Twitter, and Google Docs. In order to make sure students access resources necessary for their projects academic libraries need to explore creating links for library resources through social media.

Security is an issue with remote access to library collections. Digital collections are often made readily available to the public. However, proprietary databases (i.e., those purchased by institutions) are not, which means students may only access databases off-campus with a password. In some cases, they use their student ID number and password or a password that is generated by the library or campus Information Technology that allows them to gain access to the proxy server or VPN. Depending on the policies of the institution, the password is changed at least every semester. Despite the improvements in technology users still encounter problems with remote access. In some cases, it is the firewall installed
on the user’s computer that prevents them from gaining access. Other times it can be a problem with the database vendor’s server or the link to the database interface changed causing problems connecting.

Course management systems and distance education play a significant role in remote access to library collections. Online courses and programs are increasing in popularity and availability. Online course software allows instructors to embed links to articles from databases, videos, the library’s catalog, or links to the library’s databases and other materials students need. Another option in online courses is the “embedded librarian.” A librarian works with the instructor and students to help them with their research assignments. Since most course management systems provide an option for synchronous instruction. Librarians can conduct library instruction classes in real-time allowing students to learn about and work with the library’s resources. Blackboard is among the top proprietary course management software. In the open source course management software realm, Moodle and Sakai are the most widely used. Regardless of the course management system selected by the institution the software provides the library with the ability to embed their resources in courses for students. While synchronous instruction does not replace face to face library instruction, it provides the students with the opportunity for hands-on instruction using the library’s databases and catalog.

ORGANIZATION OF THE BOOK

Chapter 1 gives an in-depth look at the evolution and development of distance (or online) education explaining how online learning lead to the need for remote access to library materials. As distance education evolved from correspondence courses to computer-based instruction students needed the ability to use library materials both on and off campus. As technology improved, the ability for students to access resources from home became a reality. Gone are the days when books and articles were mailed to students. Instead, students can now access the databases or library catalog from home or work. Articles found through the database can be saved or even e-mailed.

Chapter 2 addresses how libraries meet user needs to provide access to their resources. Not only is it important to provide remote access to students, it is equally important to have the resources they require. Libraries can use a variety of methods to determine how they will improve their customer service. Some of the most commonly used methods are surveys, statistics, and focus groups. Each of these methods provides libraries with the opportunity to address user concerns and improve their services.

Chapter 3 deals with copyright law as they relate to off-campus access. The recent lawsuit against Georgia State University in Atlanta brought this issue to academic libraries across the country. A primary concern of the lawsuit was the fair use of copyrighted material. This chapter focuses on fair use as it relates to remote access and the use of copyrighted material in online courses.

Chapter 4 explores collection development policies for off-campus licensing of databases. In negotiating contracts with database vendors, academic libraries include a section regarding off-campus access to proprietary databases, usually focusing on password protection and fair use of the resources. Most colleges and universities include a statement that off-campus use of databases is only available to current students and faculty.

Chapter 5 examines the development of online or digital collections. Digital collections include virtual libraries and usually go beyond the scope of the library’s databases and catalog. A good example is the Digital Library of Georgia, which provides a number of resources, including photographs and documents that chronicle the history of Georgia. This is a project of the University of Georgia, and the
collection was recently expanded to include the Civil Rights Digital Library. Both collections are available to the public and to anyone who is not a student at the university, which is a common feature of many such collections.

Chapter 6 examines the types of technology used for remote access to library resources, primarily EZProxy and VPN. Both make it possible for students and faculty to access a library’s resources. EZProxy validates the user’s identity as a current student or faculty member and provides them with access to a library’s resources. Usually, the student or faculty member has to provide a password or other information that authenticates them as a member of the university. EZProxy is used to create links between databases and off-campus or remote access.

Chapter 7 focuses on the inclusion of library materials in course management systems, with the primary focus on embedding materials into online course software. This chapter explores the different course management software currently available, covering both proprietary and open source software for online course management.

Chapter 8 looks at social networks, especially Facebook, as another opportunity to provide remote access to library users. As the popularity and growth of social networks increases, the question arises: do they provide another effective means for libraries to reach their users? As this chapter shows, libraries may not be able to embed copyrighted material into a Facebook page, but social networks can provide opportunities for libraries to promote their electronic resources and provide links for students to access those resources off-campus.

Chapter 9 examines mobile technologies and their implications for library use. Recently the iPhone and other smartphones, tablet devices, and netbooks, for example, provide users with the ability to access the Internet remotely, which means users can access the library’s resources anytime anywhere. Users can locate resources and e-mail a link to the article or save it to their device allowing them to access it whenever they need it.

Chapter 10 explores virtual libraries and the new technologies available to access them. The primary focus is on e-books and the technologies available to read them. Every academic library has one or more e-book collections, but even though many reference books are now available in e-format, it remains uncertain whether students really want to use e-book collections. EBSCO recently acquired NetLibrary from OCLC, and e-brary has one of the largest collections of e-books, allowing students to find e-books on any subject. There are, however, limitations to using e-books, which make them frustrating to use.

Chapter 11 examines some of the problems users may encounter with remote access to library collections such as for example, websites that are not compatible with mobile devices, and digital collections that are difficult to search, having to enter multiple passwords to access resources off-campus. The primary focus is security. The chapter explores the types of security used to make sure only authorized user have access to library materials. It also looks at proxy servers and virtual private network securities.

Chapter 12, the conclusion, serves as a summary of the whole volume, while also providing an overview of the opportunities for libraries to improve their service to library users through remote access to electronic resources. The chapter ties together all the previous chapters and explores some of the future possibilities for remote access technologies to provide an increased range of services in libraries across the United States and beyond.
REFERENCES
