Building a Library Instruction Lab:

A Technology Planning Document

Group No. 1

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Library instruction is an integral part of academic librarianship. For this technology planning proposal, our team will describe our intent to plan the renovation of a library instructional lab. Our setting is McKendree University, a small academic library in need of improved instructional technology. This technology planning document will begin with an in-depth description of the library setting, followed by a statement of need which entails the established goals and desired outcome. Next will come the technological specifications that we believe fulfills the established need, with a brief rationale to conclude the document.

Library Setting

McKendree University is a small, private, liberal arts institution located in Lebanon, Illinois within the greater St. Louis Metropolitan area. The university serves approximately 3,000 students with about 2,400 undergraduates and 600 graduates (McKendree University, n.d.). Most of these students are residential and live and go to school at the main Lebanon campus. However, there is also a substantial online population served through several remote sites across the state of Kentucky. Many of the graduate students participate in hybrid programs, going to school while working and getting master’s or doctoral degrees through evening and online classes. The final group consists of students from the nearby Scott Air Force Base who benefit from online, hybrid, and asynchronous instruction from the university.

To support the informational needs of all these students, McKendree University has a small academic library. The mission of Holman Library coordinates with the overall university mission “To provide a high quality education, encourage openness to new ideas and dedication
to lifelong learning” (Holman Library, n.d.). They seek to accomplish this goal through library reference, research help, and information literacy instruction. The librarians promote research strategies and foster information literacy skills, helping this diverse collection of learners enhance their academic understanding and solve real-world problems (Holman Library, n.d.).

This dedication to information literacy instruction and research support requires Holman Library to have a dedicated instructional space. Currently they have one instructional lab, coined the “Mac Lab” which functions as an information literacy classroom, an open lab for students when not in use, and can also be scheduled for credit-bearing courses. Online instruction currently takes place from librarian offices, rather than in the lab, to allow for student use of the computers. This setting has been sufficient in the past, but as the university enrollment continues to grow and expand, McKendree has decided to renovate the library.

The need to evolve spaces also coincides with aging infrastructure, and an outdated iteration of an academic library. Campus administration is currently campaigning to secure funding and hope to begin major renovation in 2018. This will not only allow for new instructional spaces, but also dramatically change the layout, atmosphere, and character of the library. The entire print collection will be condensed into compact shelving on the lower level, freeing the first and second floors for collaborative work. On the third floor will be research services, including the new primary instruction lab. While the “Mac Lab” will be retained on the lower level, it will serve only as a backup classroom and open lab for students.

**Needs Statement**

Our proposal seeks to support the instructional goals of the library and enhance the mission of the university by providing a detailed technological plan for outfitting the instruction
lab with corresponding technology. This need comes from three primary hindrances to an effective instructional lab: slow and insufficient hardware and software, outdated instructional furniture layout, and a lack of addressing the diverse student populations and instructional needs.

**Primary Needs**

Holman Library’s current “Mac Lab” currently has many technical issues. The Macs, while still running, are terribly slow and therefore not the most conducive to conducting effective library instruction to classes. The lab needs computers with solid state hard drives for faster boot-up and running so users do not have to wait while they slowly start. Instruction is hindered when each student has to wait on a machine before working on assigned learning tasks. The computers also need to have a rich combination of applications and software to support the variety of classroom activities and student project needs.

In addition to the computer stations themselves, the lab is hindered by a fixed and outdated layout. Currently all the mac computers are desktops distributed around a horseshoe perimeter, with a kitchenette taking up space on the fourth wall (leftover from an older renovation). There is an instructor station with a PC desktop and standard projector. This has been sufficient for brief information literacy instruction that centers on bibliographic instruction and demonstration-based learning. However, the field continues to expand in education pedagogy and collaboration-based learning. Therefore, the lab needs to abandon the fixed approach and embrace moveable furniture to support diverse learning experiences. The instruction station can benefit from more interactive presentation such as a SMART board to allow for innovation in teaching.

The final area of need stems from the diverse and complex student population. Currently,
the “Mac Lab” only supports the ~1500 residential undergraduate students. This is effectively ignoring the graduate, hybrid, and purely online student populations. While librarians have made do using software from their work offices, a more dedicated instructional lab can better serve these students. This can include ICN connections with multiple cameras and microphones, as well as projection solutions that are interactive and can be visualized on multiple devices. We aim to create an instructional lab that can serve as both an efficient physical and online classroom for students.

Goals

Learning labs, or instructional labs, have been implemented in the academic libraries of large and small institutions (Barrat & White, 2010, Joy, Foss, King, Sinclair, Sitthiworachart & Davis, 2014). The purpose of a learning lab in an academic library is to serve a wide range of teaching and learning needs through a flexible space and a variety of technologies (Joy et al., 2014). Teachers have found that this environment enhances the learning experience of students (Joy et al., 2014).

The goals of this project are:

1. to provide a flexible study and instructional space for students, instructors, librarians, and staff.
2. to incorporate technology to support various presentation and instruction styles.
3. to engage online and hybrid students through live video chats and lectures.
4. to update the software and hardware to facilitate easy and modern learning

These goals are forward-thinking and ambitious without being out of reach. The lab isn’t just meant for faculty and staff, it is also focused on the needs of students. It is essential to remember
that this lab is meant to support the educational needs of the entire academic community.

We do not want McKendree University online and hybrid students to feel less important than the on-campus learners. We also do not want the students and the faculty to feel they are constrained into any one learning or teaching style by the setup of the lab. Instead, our goals are to create a flexible, changeable space that all students, staff, and faculty can manipulate to fit their own desires and their own vision of any given educational session. By introducing this adaptability, we are encouraging out-of-the-box thinking and promoting interactional instruction and learning.

**Desired Outcomes**

The desired outcomes of this proposal are focused on engagement and enhancement. The value of this instructional lab can be measured through the level of student, staff, and faculty engagement in the classes and educational sessions held in the lab. We want to see the usage of this lab increase, which can be easily measured through scheduling. By incorporating movable furniture, the lab aims to allow small group work to be more easily enabled. Movable workspaces also allows for individual students to tailor their study sessions more to their preferred style, allowing solitary or group study sessions.

We also want the new technology, both hardware and software to enhance student and faculty learning. There are a myriad of ways instructors and students can present their information. We do not want to limit our patrons to only one style. New software can allow straightforward presentations, remote presentations, videos, and other interactional styles. By expanding the available presentation software, we are allowing teachers and students to educate themselves and each other in new and different ways. We understand that each student learns
differently, and one desired outcome of this lab is to cater to as many of those different ways as possible.

McKendree University does have a diverse population of student types, as mentioned. Some are entirely on-campus learners, while others are entirely online. There is also a population of hybrid students who split their time between on-campus and online classes. Another desired outcome of this instructional lab is to open up the lab to those students who are unable to physically attend classes in the lab. By installing software that encourages online learning through video and chat, these distance students can be further brought into the library community. If these students understand that this lab is also for their use and benefit, they are much more likely to use the software that has been acquired for them.

**Technology**

In order to meet the our goals and desired outcomes, we will need to purchase and upgrade the current technology of the Mac lab. The first technology upgrade needs to be from fixed tables and chairs to tables and chairs on wheels. This will enable students and instructors to move and rearrange the room according to best fit their needs instead of forcing them to work within an inflexible set-up.

To enable and encourage more interactive presentations, we will purchase a SmartBoard 7000 Series with an accompanying document camera (SMART Board, n.d.-a, SMART Board, n.d.-b). The SMART Board is like a virtual whiteboard. Students and instructors can write on the SMART Board using special pens and then can even save notes as a file (SMART Board, n.d.-a). The SMART Board also functions as a projector, so presentations can be given in a more interactive fashion (SMART Board, n.d.-a). The document camera has a flexible neck design
which makes it capable of projecting images of documents or can be used as a camera for a video call (SMART Board, n.d.-b). These tools open up a myriad of possibilities. Teachers can more easily share hard copy documents or even historical documents with students physically or virtually in addition to setting up video conferences for virtual students or with professors or professionals in other parts of the world.

Finally, the learning lab will need new computers which can be used or taken away as needed. Sometimes students may not need computers, or may even bring their own laptops. We will be purchasing 38 Lenovo ThinkPad T430s Laptops, with a 2.6 GHz dual-core processor, 8 GB of RAM, and a 256 GB solid-state drive. These laptops will come with Windows 10 installed on them (TechSoup, n.d.). We will purchase these laptops refurbished through Techsoup so that we can buy more expensive hardware such as nice tables and chairs and the SmartBoard and desired accessories.

**Rationale**

The rationale of this project at McKendree University is simple. We must provide a workable, up-to-date instructional space for library staff, university faculty, and undergraduate and graduate on-campus, online, and hybrid students. The academic library must constantly change and evolve to “align with the shifting higher education model by appreciating evolving information-seeking behaviors and increased use of social media” (Delaney & Bates, 2015, p. 30). To keep up with these emerging styles of learning and teaching, McKendree University decided to reimagine its instructional lab with a focus on its students and faculty.

Open access information is becoming more widely available. Some of this information is incorrect and students are sometimes unable to make the decision of a source’s trustworthiness.
Occasionally, students are unable to find the information they are looking for and are unaware of available databases or how to use them. Utilizing an instruction lab and outfitting it with all the requisite hardware and software can diminish or eliminate these challenges altogether. Delaney and Bates, 2015, note that “changes in user activities . . . will have an impact on user behavior” meaning that patrons are going to change “how [they] engage and interact with the library and its resources” (p. 31). These changes threaten the relevancy of the modern library, even in an academic setting. These updates to and repurposing of the university’s instructional lab can keep the academic library relevant to all the students and faculty in the community.

Another challenge this instructional lab aims to meet is the “changing nature of higher education” (Delaney & Bates, 2015, p. 31). Especially in graduate education, courses are increasingly online or of a hybrid style. Instructors are beginning to recognize and work with differing learning styles. They are also beginning to experiment with different teaching styles. Users, both faculty and students, are expecting more from their libraries, including more of an online presence. By adjusting to those needs and moving the focus toward modern, collaborative, and competitive informational environment, McKendree University will prove to its community that it remains a relevant academic presence.

Other universities have also recognized this need. The University of Georgia, Athens, has created the Zell B. Miller Learning Center, also known as the MLC. This university serves over 30,000 students, so the lab “sees an average of over 6,000 visitors each day” (Barratt & White, 2010, p. 135). The MLC, as it’s called, was designed to meet all the needs of the students in one space, as well as inviting collaboration and cooperation with staff and faculty at the university. Within the MLC, “students take classes, study, participate in group activities, write, research,
and create all in the same place,” and the faculty are similarly welcomed “to teach classes, meet with students, and receive technology training” (Barratt & White, 2010, p. 135). While the MLC is necessarily a larger and more well-funded space, it too encompasses the idea McKendree is proposing, that of “allowing students to participate in the full spectrum of learning and creating under one roof” (Barratt & White, 2010, p. 136).

Conclusion

McKendree University is a small academic institution and serves only a portion of its students on-campus. The library is the heart of campus and performs a vital role in the everyday lives and education of the students and faculty. However, it is beginning to fall behind the times in regards to hardware and software. The online and hybrid online/on-campus students are being left out of the collaborative educational opportunities offered by the library. The purpose of this instructional lab is to bridge that gap between the institution and the online and hybrid students, in addition to expanding the abilities of students and faculty to teach and learn in different ways. We believe our proposal for this new and improved instructional lab supports the community’s needs of education and creation, as well as offering the flexibility and adaptability required to encourage those needs.
References


