Librarians Building Innovative Technologies: Creating It Ourselves

Tiffney Gipson, University of Louisville
Rebecca Morgan, University of Louisville
Lauren E Robinson

Available at: https://works.bepress.com/lauren_robinson/8/
As patrons increasingly rely on mobile applications and responsive websites to access information, it has become imperative that libraries accommodate these needs. Although building these resources in-house may seem too expensive, time-consuming, and require outsourcing, this project showcases how it can be achieved on a small scale using existing staff, innovative funding resources, and affordable training.

**PURPOSE**
To create a mobile app and responsive website to guide medical students in discovering the best available library resources in support of clinical decision-making and evidence-based practice.

**NEED**
Students have difficulty structuring and categorizing their clinical questions and identifying appropriate library resources.

**ENGAGED STAFF**
- At least 3 staff members
- An engaged and invested team
- Understanding of time commitment
- Administrative support

**TEAM MAKEUP SUGGESTIONS**
- Technology Rep: Admin rights to LibGuides & ability to teach fundamentals
- Collections Rep: Knowledge of library resources and usage
- Reference & Instruction Rep: Familiarity with patron population and curricula

**FUNDING**
Our organization did not have the funds to support the development of this project. As KMLA members, we were aware that excess funds existed, so we approached them about opening the undesignated funds to one-time research and professional development initiatives.

KMLA approved our proposal as follows:

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<tr>
<th>Item</th>
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<tr>
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**TRAINING**
After researching various training programs, we chose Code School for its interactivity and affordability. All three members of our team will take the iOS app development training in Code School to ensure project sustainability.

**Why iOS?**
The University of Louisville’s School of Medicine has established Macintosh computers and devices as the requirement. Therefore, this project needed to be developed on an iOS platform. That said, we will be providing a mobile-friendly web version for non-iOS users.

**WHAT IS EBM?**
Evidence-based medicine (EBM) is a systematic approach to clinical decision-making, where medical practitioners use clinical evidence from current research to determine the best course of treatment. EBM is an essential component of medical education, and medical librarians play an instrumental role in training students to answer clinical questions.

**WHAT IS KMLA?**
KMLA is the Kentucky Medical Library Association. KMLA has 27 institutional members made up of general hospitals and academic medical centers from across Kentucky.

**WHAT IS CODE SCHOOL?**
Code School is an interactive learning platform for aspiring and experienced developers. The courses are organized into learning ‘paths’. These paths include iOS, PHP, Python, IN rails, CSS, and many more.

**MOBILE APP USAGE**
From June 2017 to May 2018, KMLA’s mobile app website was visited 2,384 times.

**MOBILE APP**
Research shows medical students endorse the use of mobile applications.


**BASE SKILL SET**
While dedication is the most critical component for success, team members should have a basic understanding of software development and at least one team member should have experience.

After completing Code School training, we will be developing a mobile application demo. We will be using that demo to host informal lunches to gain feedback and increase buy-in from medical school stakeholders. These lunches will provide invaluable feedback and will be paid for using the KMLA funding. After making edits based on stakeholder feedback, we will use remaining funds for promotional purposes and begin formal usability testing.