

# Harvard Library Lab

FINAL Proposal 4/21/2011

## ***QR Codes in the Library: A Window to On-Line Research Services***

SUBMITTED BY: Andrew Wilson, Access Services Librarian, *Eda Kuhn Loeb Music Library*  
WITH SUPPORT FROM: Liza Vick, Reference and Research Services Librarian;  
Kerry Carwile Masteller, Reference and Digital Program Librarian; and  
Virginia Danielson, Richard F. French Librarian, *Eda Kuhn Loeb Music Library*

Please note: this final submission differs from the draft proposal chiefly by detailing the evaluation period, and all changes to the draft are highlighted in red.

**Summary:** This proposal to the Harvard Library Lab describes a pilot project to deploy Quick Response (“QR”) codes on signs inside the Eda Kuhn Loeb Music Library in order to provide an information service via common types of mobile devices, such as smartphones and camera-equipped tablet computers. These bar-codes can be posted and linked to URL’s for on-line research guides, call-number floor-plans, and other sources of patron information. Upon successful completion of the pilot stage, a “best practices” guide will be produced so that QR Codes can be rolled out to any Harvard library unit, as the project is infinitely scalable.



Wikipedia image

**Background:** QR Codes are two-dimensional bar-codes that are in wide commercial use, frequently seen, for example, on shipping labels employed by express companies (UPS/FedEx). Originally driven by their use in commercial shipping and inventory control (much as RFID tags were popularized by Wal-Mart’s supply-chain management practices), QR Codes are seeing vastly increased use, recently, in both media and retail applications, one notable example being the Google “Favorite Places” program, by which businesses may post QR Codes on their place of business providing instant mobile-enhanced Google-based on-line access to business information for customers, such as hours/locations, reviews, and special offers.

These codes may be generated, registered, printed, and linked to any URL at no cost from several websites, such as <http://qrcode.kaywa.com>. The codes may then be posted as signs where they can be scanned using the built-in camera and software included or available with most smartphones, including the Apple iPhone and other makes/models running the Android operating system, as well as camera-equipped tablet computers (if lacking, compatible devices may also download, usually at no cost, QR Code-reading applications). Once scanned, software links the individual code to a URL, providing access to any on-line content appropriate for such devices. QR Codes are an excellent means by which library patrons may instantly link to on-line library content. When posted, like signs, in specific areas of library stacks, patrons can receive more information about a subject area, such as research guides that relate to materials in that immediate area of shelving, as well as more general informational and directional assistance, such as library floor-plans, call number maps, and links to services such as interlibrary loan. Since QR Codes can be generated and linked so quickly and easily (with little to no attendant costs), codes linking to course websites, iSites, and research guides can be posted as briefly or as long as a course or instructor needs, perhaps even as long as a few days or a week; in this manner, instruction-directed resources could be deployed and managed similarly to course reserves.

There has been extensive dialogue taking place in the general library community regarding the application of QR codes to the library setting. Librarian bloggers, in particular, are writing about the various potential uses for QR codes, though the key here is the word *potential*. Based on a review of the literature, there is much discussion, and, to date, little implementation. With commercial interests driving familiarization, QR codes are only now starting to find their way into libraries, with applications ranging from wayfinding to inclusion in the OPAC. Given the scarcity of data presented in the literature, it can be speculated a proposed pilot project for the Harvard Library may result in the ability to make the claim as an “early adopter.” Clearly, this is a technology that has useful potential in the library setting, and it hard to doubt that it will find use across our peer institutions.

***Required Resources and Costs:*** One of the strengths of this proposal is that it requires very little in the way of staff time, resources, and financial support in order to implement, while being scalable to any desired degree. Staff time is employed when selecting specific resources to which codes will link, ensuring compatibility of those resources with mobile devices, scouting physical locations where codes are to be posted, creating the codes and signage, and managing overall use within the library unit. Other than providing for dissemination of best practices and recommended resources, there is no need for central project management after the initial implementation and assessment, as local library units can engage with QR Codes as little or as much as they please. Financial resources required are limited to the cost of sign-holders to be placed in the stacks. A quick review of library-supply vendors reveals that simple magnetic sign holders, ideal for posting directly onto shelving units start at approx. \$6./unit. This pilot project, therefore, requires a supply budget of under \$50.

***Selection of On-Line Resources in Pilot:*** This pilot project envisions posting QR codes linked to several different local resources hosted by the Music Library. Potential on-line resources include the Library Guides for “Finding Songs in Collections” (QR Code to be posted in stacks area containing song collections), and “Finding Concert Reviews” (QR Code to be posted in stacks and microfilm areas containing serials), and the “Jazz Research Guide” (QR Code to be posted in

stacks area containing monographs on the subject of jazz), materials created and maintained by Loeb Music Library reference and research services staff. These resources have already been optimized for mobile access. Other potential resources may include a stacks map/call number guide (QR Codes to be posted adjacent to public workstations) supplementing existing signage in the library, links to on-line versions of reference works, and research guides specific to courses offered by the Harvard Music Department (with the assistance of library research services staff), in which Department faculty could be involved, much as they recommend course readings.

***Proposed workflow:***

- *Assign staff in the library unit(s) to handle the work*
- *Identify on-line resources useful to patrons*
- *Identify locations for posting the codes*
- *Ensure on-line resources are optimized for display on mobile devices*
- *Generate and link the codes to on-line resource URL's*
- *Store codes and links in a local database for project management purposes*
- *Print codes and embed them into appropriate signage*
- *Post signs with codes in specific areas of the library*
- *Promote the new service within the library unit*
- *Monitor usage and determine the effectiveness of the program using Google Analytics for assessment*
- *Upon determination that initial project is successful, make best practices available to units across Harvard Library*

***Assessment and Pilot Deliverable:*** Assessment, to gauge patron use and effectiveness, can be measured using Google Analytics, in order to capture mobile device utilization, click-throughs, and other measurements of use. Given the novelty of such on-line access in an unconventional setting within the library, it will be extremely interesting to see what kind of utilization this pilot will generate. There is no preconceived benchmark for success or failure, though a notable paucity of use will likely indicate a lack of widespread acceptance of the technology at this time. The deliverable to the Harvard Library at the conclusion of the pilot period, anticipated to be through the Fall Semester, 2011, will be a manual for implementation, detailing best practices, that will be made available across the units of the Harvard Library, providing guidance to library staff who would like to expand access to their on-line resources through the use of QR Codes.

***This should provide an adequate period of assessment during which the pilot's usefulness can be evaluated. By conducting assessment over the sixteen weeks of the semester, usage can be gauged during specific subsets of time, such as midterms, Reading Period, and Exams, in addition to overall utilization throughout the course of the semester; it would be anticipated that the library would not experience enough representative traffic during the summer months. In addition, the pilot would be best run during a time when Harvard students are present at full strength, allowing for a full accounting of the use of mobile devices typical of the student body.***

***Summary:*** Despite the small scale and low costs of this proposal, a QR Code pilot is ideally launched under the auspices of the Library Lab because it will test this application of technology on a local unit scale, providing proof of concept, which can then be rolled out to the larger Harvard Library community. This project extends teaching and learning resources into places within the physical library space that were heretofore inaccessible. Linking a special subject online research guide to a relevant area of library stacks takes advantage of the benefits of browsing collections, while providing instant access to targeted research services and materials currently available in our robust virtual library space.