

College & Research Division (CRD)

# Pennsylvania Libraries: Research & Practice

Practice

## Making Your Mobile Device an Art Expert

Using QR Codes to Tell the Story Behind artiFACTS in Your Library

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Have you ever wondered about the stories behind the public art in your library? Every object has the potential to tell a story-the paintings, the sculpture, the furniture, and the building itself. At Musselman Library, Gettysburg College, we use QR codes as the technical means to satisfy the natural curiosity of our patrons. Historical information already available in our Special Collections and College Archives was repurposed for the mobile-friendly environment. The artiFACTS project proved to be simple, scalable, and a great opportunity for collaboration. This article will discuss how we implemented artiFACTS, including creating QR codes, marketing to campus constituencies and visitors, gathering feedback from students and faculty members, and evaluating the project's success.

Musselman Library is an academic library, but it is also a very public space. In addition to the virtual and physical collections represented by the banks of computers and shelves of books, there are also paintings and sculptures that accentuate the educational mission of our library.

At Gettysburg College we use QR codes – square bar codes that deliver information to mobile devices when scanned—as the technical means to satisfy the natural curiosity of our patrons regarding the artwork in our library and the aesthetics of our campus (see Figure 1). Our artiFACTS labels connect our patrons to the rich stories behind the art, architecture, and personalities that have contributed to our past and continue to shape our future.

## Background

Part of our work as librarians is anticipating the information needs of our patrons. This includes identifying the types of information, as well as the time and place of that information need. Mobile technologies have presented a

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new opportunity to deliver information in a way that aligns with the expectations of the user, and QR codes can connect the mobile user to library resources and services. Together these technologies empower the user to retrieve information instantaneously.

We began experimenting with QR codes at Musselman Library in 2010. We placed QR codes on posters for library programming and added them to advertising in our campus newspaper in order to market our services. We also used QR codes to connect our physical collections with our growing virtual holdings. For example, visitors to our DVD collection discovered codes directing them to our online documentary film databases. Additionally, we used them in library instruction to connect students with an online form for providing feedback about library sessions.

The *Library Success Wiki* reveals that these are typical approaches to the use of QR codes by academic libraries. QR codes have also been used by libraries as part of open house activities for first year students at the Lafayette College Library, and as a way to deliver book location information from a library catalog to a user's mobile device at the San Diego State University Library (QR Codes, n.d.).



Figure 1 ArtiFACTS sign and corresponding mobile website.

In the fall of 2011, the director of Musselman Library charged a small working group with exploring digital humanities initiatives. Among our tasks, we were asked to brainstorm projects that could be implemented by repurposing data that already existed and that used readily available technology to fill a need. We examined our library's mission statement to help us formulate new projects:

Musselman Library engages our community of learners by

- building and providing access to collections that support study within traditional and emerging disciplines;
- creating learning opportunities that support curricular inquiry, encourage critical thinking, stimulate curiosity, and enliven the imagination; and
- providing an inviting environment in which to think and study, question and discover, reflect and connect (Musselman Library, 2007).

The last two bullet points about "stimulating curiosity" and "providing an inviting environment" in which to discover and connect reminded us to take a look at our own building for ideas. How could we enhance the experience of being in Musselman Library?

Our library building is open for students 24 hours a day 5 days a week when classes are in session. We have a high gate count for a small liberal arts college—212,500 in fall 2012—and we are part of the admissions tour for prospective students and a familiar stop for alumni visiting campus. As we looked around at the walls and floor space that surrounded our students and visitors, we saw the potential for the artwork in our building to become a more active part of our collection offerings. Every object had the potential to tell a story—the paintings, the sculpture, the furniture, and the building itself.

There were already labels giving brief descriptions for some of our artwork, but in this virtual age there is so much more we can provide for the curious patrons within our doors. Since we serve the information needs of the 19-22 year old demographic, we are very aware that many of our students have cell phones on hand to address their information needs. A recent study by Pew Internet & American Life Project revealed that 66% of adults age 18-29 own smartphones (Rainie, 2012). What if we made it possible for these mobile devices to teach the history of an object by providing instant information about that object and even its tie to our college's history? This would be an engaging way to revitalize information that was readily available from our Special Collections and College Archives as well as the college website. Without leaving the site of the object, the patron could experience the artwork in a more informed and fun way.

The process of making artiFACTS a reality came quickly once the conversation began. The process was simple: select the object; research the object; create the mobile page; generate the QR code; and design, print, and post the sign.



#### Figure 2

This samurai armor, located on the main floor of Musselman Library, is a common source of inquiries, making it an ideal candidate for the artiFACTS project.

## Select the Object

For the selection criteria, we wanted to identify readily visible objects for which we already had interesting information. We focused on items that were aesthetically engaging and ideally had some tie to Gettysburg College. The samurai armor that we have on display on the main floor of our library was our first candidate because we have had several inquiries about it over the years (see Figure 2). By our second meeting we already had over a dozen candidates.

## Research the Object

Special Collections and College Archives staff members were involved in paring down the candidate pool by confirming which objects could be described accurately and had that crucial tie to our campus legacy. Existing online sources were mined for information, and additional research was done in Special Collections. Then one of our staff members who contributes articles to our Friends of Musselman Library newsletter was charged with the final fact check and the writing of the short entries for our mobile web pages. A member of our marketing committee provided the name artiFACTS and the logo. Already the project was proving to be a marvelous collaborative opportunity for the library staff, and we were beginning to nominate objects outside of the library.

## Create the Mobile Page

All of our artiFACTS web pages are mobile friendly, using a web page template that is optimized for small screens and devices with less processing power. Mobile-friendly pages keep images small enough to load and view on such devices, and they provide only the most pertinent, quick-reference information. We are fortunate that Gettysburg College had already developed a mobile-friendly web page template that was used in the past, both in the library and across the institution, so we are able to easily populate the existing template with our artiFACTS content.<sup>1</sup> We include three different types of information on each artiFACTS web page, in cases where the desired information is available. This allows us to provide some consistency between pages, but it also ensures that we



Figure 3 The Eddie Plank baseball, on display in Special Collections, is a popular artiFACT highlighting College history. answer the key questions we anticipate about each object. This information includes a description of the object or artwork, information about the subject or owner of the artifact, and the connection the object has to the college.

For example, we have a baseball signed by Eddie Plank, a Major League pitcher who was elected to the Baseball Hall of Fame in 1946 (see Figure 3). The artiFACTS page describes the baseball as a practice ball, it elaborates on Plank's success in the majors, and it explains Plank's role on the Gettysburg College baseball team, despite the fact that he was not a student at the college.

In addition to describing these aspects of each artifact in a succinct, mobile-friendly format, we also provide links to additional information for those who wish to research further. We include a link to an online form that allows users to ask an archivist for additional information, and an email address that can be used to suggest new objects to include in artiFACTS.

Finally, we created a homepage for artiFACTS (www.gettysburg.edu/library/m/qr), which brings all of the items together, and lists them by their location, allowing the enthusiastic visitor to guide themselves to additional objects. Our promotional materials point to this page.

## Generate the QR Code

Before generating the QR code for an object, we use the Google URL shortener (goo.gl) to create a short URL for our desired target website. We do this because a shorter URL results in a less complex QR code. The simpler codes are not only faster and more accurately scanned, but they are more visually appealing than more complex codes (see Figure 4). Additionally, using this unique URL for the QR code allows us to track—via the Google URL shortener tool—the number of times that a QR code is scanned.



#### Figure 4

The QR code on the left points to the original web page URL. The less complex code on the right illustrates the benefit of using a shortened URL to point to that web page. While the Google URL shortener also generates QR codes, they are small and not as cleanly reproduced as we would like them to be for our artiFACTS signs. So we generate the QR codes using an online QR code generator called Kayawa (qrcode.kaywa.com). This involves simply copying the shortened URL into the generator and saving the generated code.

## Design, Print, and Post the Sign

Once the QR codes are generated, we add what we like to call a "whimsy" to the code. The whimsy is a small black-and-white image or icon that somehow represents the individual artifact. We place this whimsy on the QR code, usually in the lower right corner. We chose to make the whimsy black and white, in order to help it blend in to the code. While covering a small portion of the code with an image will not interfere with the ability to scan the code, we test the code at this point to ensure that it works properly. The whimsies not only add visual interest to the artiFACTS signs, but they serve the practical purpose of helping us—especially when getting batches of signs back from the printer—to differentiate between the signs.



#### Figure 5

The QR code signs for each object incorporate a "whimsy" like the lock shown here, as well as the artiFACTS logo and instructions for using the QR code. The completed QR codes are then inserted into a template that we created for the artiFACTS signs. These signs are  $4'' \times 6''$  in size, with rounded corners that resemble the shape of a smart phone. They include the artiFACTS logo; the artiFACTS tag line, "Every object has a story"; a brief description of how to use the QR code; the URL for the artiFACTS project homepage; and our library wordmark (see Figure 5).

Our artiFACTS signs are made from printed vinyl applied to 1/8" PVC, with satin lamination. They are intended to be used in indoor and outdoor settings, so they must stand up to diverse environments. Because our on-campus print shop could not meet these requirements, we have our signs printed by a commercial sign vendor for approximately \$8 each. Other libraries may be able to have their signs printed at an on-campus print shop at a similar or reduced cost.



#### Figure 6

The rack card promotes the artiFACTS project at various high-traffic campus locations.

We have, so far, affixed all of the signs to walls, display cases, etc. using Command brand picture hanging strips from 3M. These strips provide a sufficiently strong hold, even on textured walls, while limiting potential damage to the surface to which they are attached. This is of particular concern for us, as artwork often moves around

our building and around campus, and we want the QR code signs to go where the artwork goes. As we expand to additional outdoor artiFACTS, we anticipate having to find creative new approaches for displaying the signs.

## Marketing

We officially launched artiFACTS in summer of 2012, in time for reunion weekend on our campus. We considered this to be a good time to roll out this project, as it is a time when we have many visitors on campus who are interested in learning more about college history, reminiscing about their time here, and sometimes just looking for something interesting to do.

In anticipation of reunion weekend, we created promotional materials to spread the word about this unique project. This included the creation of rack cards that we put on display in the library, the alumni house, and the admissions office—all places we anticipated having heavy visitor traffic (see Figure 6). In addition to the logos that visually tie them to the artiFACTS signs, these rack cards provide a brief description of artiFACTS, as well as images of some of the more popular objects featured in this project. We also included the URL for the artiFACTS homepage and a QR code that points to that page.

Additional promotion includes an upcoming article in our library newsletter, the incorporation of artiFACTS into the library's portion of student tour guide training, an email to faculty, and promotions on the library website homepage. We've also used word of mouth and pointed out the labels to visitors. Students who ask about the unique objects in our library have also helped identify artiFACTS, as well as faculty members who have encouraged their students to research the history of our campus.

#### Assessment

We collect usage statistics that measure both the number of views of the individual artiFACTS web pages, as well as the number of scans of each QR code. The QR code scans were counted by the Google URL shortener, and the page views were determined using Google Analytics, the product we use to track all of our website usage statistics. As of the writing of this article, less than a year after the launch of this project, artiFACTS QR codes have been scanned 277 times, and artiFACTS pages have received 1,725 views. We believe that the page views are higher than the QR code scans because we have made it possible to move between artiFACTS pages, and because these pages are discoverable via our website search, as well as commercial search engines.

In addition to usage statistics, we have also received anecdotal feedback about this project. We have two artiFACTS on display in our Special Collections reading room, and visitors to those





Retired faculty member Jim Agard poses with his sculpture, Consonance, one of the newest additions to artiFACTS.

exhibits often notice and enthusiastically scan the QR code signs. Users seem to already know what QR codes are and how to use them. We get the occasional question about whether we can suggest a QR code reader, but we have observed that QR codes facilitate a self-service experience. Additionally, we have had faculty so intrigued by this project, that they have nominated objects—including their own work—to be made into artiFACTS (see figure 7).

## Next Steps

We have several objects on our list of future artiFACTS, and we are continuing to add more. While we are still looking at objects within our library walls, additional objects on our larger campus are under consideration for this project. We are eager to add items that are in areas that get a lot of off-campus visitors, including a statue of President Eisenhower that resides outside of our admissions office. This will increase the visibility of the project, while also telling the story of objects that are viewed by many students and visitors each year.

We continue to assess this project and will likely make adjustments to this project, based on what we learn. For example, while our current artiFACTS feature QR codes and mobile-specific web pages, if newer methods for delivering information burst onto the mobile landscape, we have laid the groundwork to adapt to those changes. As the project expands beyond our library's walls, we also plan to create an interactive map—perhaps using Google Maps—which will give a good visual representation of the locations of all of the artiFACTS on campus for those who wish to take a self-guided tour of the objects.

## **Concluding Observations**

Every object has the potential to tell a story, and artiFACTS proved to be a creative way to satisfy the natural curiosity of library patrons and campus visitors using the devices they already have in hand. The artiFACTS project is simple, scalable, and a great opportunity for collaboration. It can easily be adapted for use by smaller cultural institutions or larger universities. It is an economical way to tell the history of an object without constantly changing the physical label.<sup>2</sup> It gives objects you pass every day a chance to speak for themselves.

## Notes

<sup>1</sup> Our college developed our mobile template using iWebKit (http://snippetspace.com).

<sup>2</sup> This article resulted from a Pennsylvania Library Association presentation that we made as part of the panel, *Moving Towards the Future: Three Applications of Cutting-Edge Mobile Technologies in Libraries.* For further information on this project with illustrations, please view our PaLA presentation available through *The Cupola: Scholarship at Gettysburg College*, http://cupola.gettysburg.edu/librarypubs/6.

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