The Accidental Archivists: Lessons Learned from a Digital Archive Project

Robert Linz  
*University of Colorado Law School*

Karen Selden  
*University of Colorado Law School*

Georgia Briscoe  
*University of Colorado Law School*

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The Accidental Archivists: Lessons Learned from a Digital Archive Project

By Robert Linz, Karen Selden and Georgia Briscoe

Abstract

This article tells the story of the University of Colorado Law Library’s successful effort to develop its first digital archive. The sudden death of the Law School’s Dean was the catalyst for this project, with a goal to unveil the archive at a memorial symposium scheduled nine months in the future. The Law Library staff had never tackled a project of this type or scale before. This article discusses the technological, cataloging and management issues which were encountered during the project. It also provides advice and tips on how librarians in their own institutions can accomplish such a project.

Introduction

University of Colorado Law School Dean David Getches died after a brief illness in July 2011. He had been a faculty member at the University of Colorado Law School (Colorado Law) since 1979. While his legal career lasted over 40 years, his impact upon the legal community is still being measured. He wrote many books and articles on water law, natural resources law and Indian rights. He was a founder of the

1 All three authors work as librarians at the William A. Wise Law Library at the University of Colorado Law School. Robert Linz is the Associate Director and Head of Public Services. Karen Selden is the Metadata Services Librarian. Georgia Briscoe is the Associate Director and Head of Technical Services. The authors extend their deepest gratitude to the law library faculty and staff who made this project possible.
Native American Rights Fund and he served as Executive Director of the Colorado Department of Natural Resources from 1983 to 1987. Professor Getches became Dean of the Colorado Law in 2003. In his eight year deanship, he managed to garner support and secure funding to build Colorado Law’s current building, the Wolf Law Building, a LEED certified structure. He grew the Law School’s faculty and influence and yet continued to be an accessible professor and administrator. For many reasons, Dean Getches was a much beloved figure in our law school community.

In July 2011, Susan Nevelow Mart began working as the director of the William A. Wise Law Library at Colorado Law. Professor Nevelow Mart had been chosen for this position, in part, because of her expertise in creating digital collections. Dean Getches hired Professor Nevelow Mart in his final month as dean, June 2011. He recognized the need for law libraries to embrace digital collections and provided additional funding to Professor Nevelow Mart for this purpose.

When Professor Nevelow Mart began her new job on July 15th, she was greeted by Colorado Law’s new dean, Phil Weiser, and a project. Dean Getches planned to retire in July 2011. As a result of his pending retirement, he had been working to collect and move his papers and other work products to his new office. Although this work was ongoing, Dean Getches’ illness and sudden death took everyone by surprise. When he died, his assistant hastily assembled the remainder of the dean’s papers and other materials. Dean Getches’ family quickly decided to donate most of those papers to the law school. These materials occupied over 50 file boxes and contained over 1,000 books.

On July 18, just three days after Professor Nevelow Mart began her work at the Wise Law Library, a meeting was held to determine how to meet Dean Getches’ final wishes to distribute his scholarship as well as to remember a fond colleague. The meeting consisted of Professor Nevelow Mart, Doug Enzor, Dean Getches’ assistant, Professor Charles Wilkinson, a longtime friend and professional colleague of Dean Getches, and two law librarians. At this meeting, the group decided to give the materials to the
Law Library, which would exercise its usual care in processing and preserving them. However, the group also decided that a portion of these archives should become the first digital collection and digitization project of the Law Library. Ironically, the Law Library’s first digitization project became the works of Dean Getches, who promoted digitization.

In addition to this far-reaching decision to digitize parts of the collection, it was also decided that this new digital collection would be unveiled at the Getches Symposium scheduled for April 26-27, 2012—just nine months away. Colorado Law scheduled this symposium to honor Dean Getches’ life and scholarship in the broad range of subjects in which he worked: Native American law, natural resources law, and water law. The list of speakers at this symposium included scholars in these respective fields, as well as justices and judges, attorneys, and friends of Dean Getches.

Professor Nevelow Mart and the Law Library staff had quite a large and daunting project to accomplish in a relatively short period of time. The Wise Law Library is relatively small, consisting of eight professional librarians, ten library assistants, and a collection of over 450,000 titles and one million volumes and equivalents. Librarians and staff are called upon to juggle multiple roles and to work simultaneously on several projects. In this article, we discuss the issues involved with this digital project and the methods the Law Library staff employed to accomplish the project. In Part I, we discuss how the library managed the project. In Part II, we discuss the various technological needs of digitizing a collection. In Part III, we share some reflections on the process of undertaking such a project. Throughout this article, we highlight the various lessons we learned for our ongoing digitization efforts.

**Part I – Project Management**

*A. Initial Considerations*
When the collection initially came to the library, our first response was to evaluate it and determine what impact the processing of the materials would have upon our existing workflow and projects. It was a large collection of books, journal articles, cases, testimony transcripts and artifacts. We recorded an inventory of the collection and then determined that we needed a committee to manage this large project. Jane Thompson, our Faculty Services Librarian, chaired the committee.

The committee consisted of a cross-section of technical services staff, public services staff and library technology staff. The committee confronted three challenges. The first challenge was how to process the physical collection. Would we apply our normal procedures to these materials or would we do something special to accommodate this unique collection? The second challenge was how to create the digital archive. What was involved in creating an archive? What hardware and software was required? How would materials be shared and made searchable? Finally, the third challenge was to finish the project by the April 2012 deadline while keeping up with our regular duties. How would we manage these additional tasks with our normal workload? How would we set goals to ensure the work was getting done in time for our April deadline? And how would we keep motivated? Our very first task, however, was to handle the paperwork for the donation.

B. Paperwork

One of the early tasks we confronted was to create appropriate documentation for the collection. This consisted primarily of two documents. The first document was a thank you letter to Dean Getches’ family who made the donation. In the letter, we acknowledged our gratitude for receiving the gift and provided a brief description of the collection for tax purposes. We also indicated we would request an archives agreement from the family, which the university’s legal counsel required. As we had no experience creating such a document, we consulted with the four sister libraries in the University of
Colorado system. They sent us sample copies of some of their donor agreements. Using those agreements as a model, we drafted an agreement to meet our particular needs. While we sent the thank you letter soon after receiving the collection, we were slower to get the signed archives agreement document, partly in deference to the family’s grieving. Professor Nevelow Mart invited Dean Getches’ wife, Ann, to her office for some wine and cheese, and to thank her for the donation. Mrs. Getches informed us that there were more materials at her house that we might receive as a future gift. Importantly, throughout the process of working with this collection, we reached out to Mrs. Getches to include her at important developmental milestones of the digital collection.

C. Processing the Physical Collection

In processing the physical collection, we had to decide whether we would apply our normal procedures, or vary those for this unique collection. For example, would we add a second copy of a book from the Getches collection even if we already owned a copy in our existing collection? How would we denote that donated materials added to our collection were a part of the Getches collection? Would this designation derive solely from a bookplate placed in the item or would we also add a note to the bibliographic or item record? And should we create a unique bookplate for the Getches collection? Could we create a digital bookplate to accompany the library catalog display? In due course, we settled these issues by varying our procedures to ensure the collection would receive the recognition it deserved. We employed all staff to help process the materials. We decided to create both a note in the bibliographic record as well as a physical and digital bookplate.

Each of these decisions created challenges. For example, we conceived a digital bookplate based upon a new physical bookplate created just for the materials in this collection. However, we encountered some difficulty getting our Innovative Interfaces Millennium catalog to display those bookplates properly. We
do not own Innovative Interfaces’ WebBridge product. Ultimately, we solved this challenge by adding a 970 10 MARC tag with the bookplate image file. This cataloging solution was one of the many cataloging issues we needed to solve.

D. Scoping the Collection

When we initially began our project, our goal was to digitize the non-book materials given to us by Dean Getches’ family. At first glance, Dean Getches had relatively modest curriculum vitae. However, Ms. Thompson did her usual meticulous research and compiled a bibliography of over 300 entries. The bibliography included materials we received in the donation, but also many other items that were not gifted to us. Given the range of his scholarship, the project goal changed from simply digitizing the non-book materials on hand to creating a comprehensive digital collection of Dean Getches’ non-book works. Consequently, library staff spent additional time locating and obtaining copies of materials that Dean Getches’ contributed to or authored.

Ms. Thompson used many traditional sources to discover works by Dean Getches – our Law Library catalog; article indexes; OCLC’s WorldCat catalog; Westlaw & Lexis; and the catalog of the National Indian Law Library (NILL), which she consulted to find briefs from Native American Rights Fund litigation. While NILL let us borrow many briefs to scan, Ms. Thompson also needed to contact the National Archives to request two of them. While she was working with the National Archives, she discovered that she sometimes had items they did not list in their holdings. Our Digital Services Librarian, Erik Beck, suggested allowing the public to notify the National Archives in such instances would be a great way to use “crowdsourcing” to improve their collections.
The very first step we made toward gaining permission to digitize any of Dean Getches’ works was to make sure that the archive agreement that we made with his family contained permission to post items on a public website.

Then we consulted the extensive bibliography of Dean Getches’ scholarship compiled by Ms. Thompson. We identified approximately 50 articles that we wanted to digitize and make available in the repository in time for the symposium.

Understandably, most of his scholarship was published in law reviews and, not surprisingly, we found them to be more generous about letting us freely post articles online than the commercial publishers. We used current hardcopy journal issues to obtain contact information, and then we sent a boiler-plate e-mail to each journal that was tailored to ask permission for a particular article. We sent the initial batch of e-mails in November 2011. In retrospect we suspect that our low initial response rate was due to the heavy workload occurring at most law schools at the end of the semester. However, we had approximately a 60% response rate after sending a second e-mail reminder, and then made follow up phone calls to eight or 10 unresponsive journals. For project management purposes, Ms. Thompson created a spreadsheet that was organized by journal title to track contacts made, copyright permission status, and if or when the article was digitized. We did contact the Copyright Clearance Center to seek permissions from a few commercial publishers, but the only one willing to grant permission to post on a publically available website was, interestingly, the American Bar Association.

In order to save time and effort digitizing articles, we identified thirty that were already available in pdf format in HeinOnline. To use these electronic copies, we needed to add an addendum to our original HeinOnline license agreement. This addendum had three requirements:
1. We had to obtain written permission to post from each journal (which we had already done);  
2. We had to display the HeinOnline article coversheet with each article; and  
3. We had to list the specific articles that we wanted to use.

The last requirement meant we needed to create a separate addendum to our HeinOnline agreement each time we wanted to use additional HeinOnline digital content for the Getches repository or any other digital repository that we might create. So it is a wise practice when using HeinOnline digital content to group these items into larger sets in order to avoid creating many smaller addendums to the original HeinOnline agreement.

Once we worked through the copyright issues associated with the journal articles, we began to explore the copyright issues associated with other items that we wanted to digitize. For legal briefs, we were aware of the then-pending litigation in California by an attorney who was unhappy about the inclusion of his briefs in Westlaw & LexisNexis. However, given the non-profit, academic nature of our project, we decided to include the legal briefs without additional permission.

Another category of items we needed to consider for copyright purposes was testimony Dean Getches made at Congressional hearings. Printed versions of Congressional testimony are freely available through the Federal Depository Government Documents program. Our main campus library is a full government document repository, so we consulted with our colleagues there for advice about digitizing this testimony. While they confirmed that there is no copyright on the testimony itself, they pointed out those sometimes copyrighted materials, such as articles or book chapters, are included in these volumes to supplement the testimony. For this reason, as well as for the ease of locating Dean Getches’ specific testimony within what are usually quite lengthy documents, we made a policy decision to digitize only the pages that contained the Dean’s actual testimony.
Finally, for the 24 cases that Dean Getches litigated and were officially reported and printed in West Reporters, we decided to approach Thomson Reuters for permission to download the pdf versions from Westlaw. Thomson Reuters did give us permission to use these electronic copies, with two requirements. First, they provided us with the specific copyright language that they wanted us to use with each digital copy. Of course, this was similar to our agreement with HeinOnline, so this was not a problem. However, they wanted us to renew the copyright permission annually. Obviously, this is inconvenient, so we are hopeful that we can negotiate for permanent copyright permission, like we have with HeinOnline articles. However, if we cannot negotiate for permanent copyright permission, we might consider using cases available in Google Scholar. Overall, the main lesson that we learned from the copyright permissions process is to be organized and diligent.

Part II – Technology

In order to complete a digitization project, the library staff must confront a few technology issues. Indeed, using technology is a critical step in order to have a digital collection at all. While some materials are born digital such as Word documents, PDF documents, or digital photographs or video, many materials are only available in their original hard-copy form. The first step was to assess our needs.

A. Assessing Needs

Fundamentally, there were two technology needs. First, we needed to determine how to digitize the items targeted for the collection. Then, we needed to determine how to upload the materials into an online repository so that they could be searched and read.
To accomplish these two fundamental needs, there are four steps. The first step is to inventory the materials. The second step is to obtain and use the appropriate equipment to digitize the materials. The third step is to edit the digitized documents to produce quality, usable scans. The final step is to upload these digitized materials with appropriate metadata into the repository so they can be found by researchers and by search engines such as Google Scholar.

Our threshold question is what types of materials needed to be digitized. The vast majority of a collection like this one is in print consisting of books, law journal articles, legal briefs, transcribed speeches and testimony, etc. However, since Dean Getches was an active member of the legal community, served as Dean of the Law School and contributed to many projects, there were other types of materials including photographs, videos on VHS cassettes and even drawings and a map.

We considered the quality and size of the materials. Were the materials fragile? Were they oversized? Were they especially thick or bound tightly?

We also considered the quantity of materials needed to be digitized. In part, this was necessary to determine how much time it would take to scan the items. But this question, like the others encountered at this point in the project, helped us determine what type of scanning hardware we needed to digitize the materials. In turn, this helped determine the cost of this part of the project and how best to accomplish the digitizing process.

If we had many materials to digitize, we would likely need to purchase a scanner and do it ourselves. But if we had fewer materials to digitize, perhaps we could borrow a scanner or even outsource this part of the project to a local vendor.

From our inventory, we determined we had a large number of documents, some of which were bound. To digitize these, we would need a scanner of some type.
To convert the old VHS cassettes, we needed a VCR, a computer, a capture card which converts the output of the VCR into a digital signal, and then software. We had already begun converting our VHS cassettes in our Rare Books Room, and so we had all of the video conversion equipment and experience in using it. So, for the Getches archive project, we focused on scanning the print materials.

B. Scanner Considerations

Once we determined that the quantity and type of materials required that we purchase a scanner, we began to search for one. At the 2011 American Association of Law Libraries (AALL) conference, we explored all of the different scanning products of each appropriate vendor who exhibited. As we did so, we considered various features of the scanner. First, we considered whether to purchase a flatbed or planetary scanner. Both can produce high quality scans. Flatbeds scanners, particularly with a document feeder, are faster for documents. Planetary scanners, which locate the camera above the document being scanned, are better for books and large documents. Planetary scanners produce high quality scans but are more expensive.

Next, we considered how large a platen we needed. Generally, larger platens allow larger documents to be scanned. We also considered the shape and flexibility of the platen. Some platens are hinged in the middle while others are permanently V-Shaped. These angular platens make it easier to scan fragile or thickly bound books.

Finally, we needed to consider cost. Higher quality planetary scanners can be quite expensive, costing $15,000 to $25,000 and more. In addition to checking for educational discounts librarians may want to check if their membership in a consortium qualifies them for a lower price. We also considered annual maintenance costs and other fees, such as the cost for the company to deliver and set up the scanner.
Ultimately, we purchased a BookDrive Pro\textsuperscript{2} scanner from Atiz Corporation\textsuperscript{3} using the funds that new Law School Dean Weiser made available to the library for technology projects. This product appealed to us for a variety of reasons: 1. Design: This scanner consists of a steel frame, two Canon digital SLR cameras, and software. This is a pretty simple, trouble-free design. Although the company would assemble the unit for us, we did it ourselves in a few hours. 2. Upgradeability: Because the design uses standard, off-the-shelf Canon digital cameras, we can upgrade to better quality cameras at any time or even for a particular project, or when the original Canon cameras wear out. Also, because these cameras use interchangeable lenses, we can upgrade to higher quality lenses for relatively little cost. 3. Usability: The design scans two pages a time and the included software does a pretty good job of processing the images. 4. Quality: Between the high resolution cameras, platen design, and software, the unit is capable of creating super high quality images. And finally, 5. Cost: This setup cost about $18,000. We bought the frame from Atiz, the digital cameras and lenses from Adorama\textsuperscript{4}, a low-cost camera reseller, and we used a computer we already owned.

Before we decided to purchase the Atiz product, we did our due diligence for purchasing, including: getting on-site demos, speaking with existing customers visiting a customer and testing their equipment, and talking with sales and customer service representatives.

C. Scanning Quality and Usability

The next step in the process was to learn how to produce a usable high quality scan. So what is a quality usable scan? For text, a high quality scan is one in which the text is dark and the page is white and does not have a very much noise, or strays marks or bleed-through from the text on the back side of the page. For photographs, we wanted accurate color reproduction. And of course, the images have to be

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Figure 1: A high quality scan of a page from a book.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Figure 2: A blurry scan of a page from a book.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{Figure 3: A scan with bleed-through from the text on the back side of the page.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.png}
\caption{Figure 4: A scan with strays marks on the page.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{Figure 5: A scan with low resolution.}
\end{figure}

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\textsuperscript{2} Information on BookDrive Pro scanner model, \url{http://pro.atiz.com/}.
\textsuperscript{3} Atiz Corporation website, \url{http://www.atiz.com/}.
\textsuperscript{4} Adorama website, \url{http://www.adorama.com/}.
absolutely sharp. The capture and editing software should allow the operator to adjust the contrast and brightness, and properly adjusted cameras should take care of the sharpness and color reproduction.

A usable scan is an image which provides a high level of quality in as small a file size as possible. We experimented with different settings to make this possible.

We started the project by discovering what others in the field had written about scanning and how they proceeded with their projects. One of the early resources we discovered was a document written by Paul Royster at the University of Nebraska titled “The Art of Scanning.” We attended a webinar he presented and found his paper in the University of Nebraska digital repository. In the paper, Professor Royster details what constitutes a quality scan for text and images, and how to set the scanner and software to maximize image quality while minimizing stray marks and other errors in the original. We printed this page and kept it near our scanning workspace.

The basic steps in this process are to capture the image as a JPG-formatted file, adjusting the software as necessary to create clean, readable text and images, and then converting the JPG images into a single portable document format (PDF) file. The software that came with our scanner proved to be excellent. It both captured the image and allowed us to do some editing. We could create dark text and eliminate image bleed-through from the back side of the page to create a clean white background. It also combines the pages into a single PDF file, although we could also do that using Adobe Acrobat. We could also use Adobe Photoshop to edit the JPG files if necessary.

We wanted to OCR the full text documents. OCR, or Optical Character Recognition, is the process through which characters are recognized as text by the software. This process is easy to do using software. Once the PDF documents are created, we use Adobe Acrobat to read the text images of the

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document to recognize the underlying characters as text. A text file is created and “underlies” the PDF document. Therefore, researchers can use the search feature in Adobe Reader to find passages in the document using full text searching. When the document is uploaded to the repository, the document’s text is searchable.

We also needed to settle upon a scanning workflow. We used a computer attached to the scanner to capture and even edit images. Staff can divide the capture process from the editing process, and use two computers to complete this process. In our library, for example, we have one computer attached to the scanner. Our student workers and other library staff use this computer solely to scan and capture. We have two or three permanent library staff who work on the editing process. So, we installed the Atiz editing software and Adobe Acrobat software on their computers. Finally, permanent library staff ensures quality control.

D. Computer Hardware and Storage Considerations

Our next consideration was to determine the computer hardware and storage requirements. We started our project with a Dell Optiplex Pentium 4 computer from our inventory of superseded computers. This computer was equipped with 4 GB of memory, two 160 GB hard drives, and Microsoft Windows 7 operating system. It worked just fine although it was somewhat slow. We did not realize just how slow until we upgraded to a new Dell Optiplex 990 computer. This is a newer dual core processor which was equipped with 8 GB of fast memory, a 1 TB hard drive, a video card with discrete memory, and Microsoft Windows 7. The results were impressive. We saved nearly 15 seconds for every pair of scanned images. While that may not seem like a lot, it saves hours of time and labor costs over the course of a large project.
Another aspect to consider is where to store the image files. This storage space needs to be secure yet accessible to any person who will edit the images. We needed to ensure two types of security. The first is physical security. We did not want someone walking away with the hard drive containing the files. But more so, we wanted to ensure data security by creating multiple copies of the files should the hard drive storing the files fail. We used two methods to accomplish this level of security. First, we purchased an external, large capacity, network attached storage (NAS) device. These devices are not expensive; we purchased a 2 TB model for approximately $300. This unit can be attached to the network to allow for remote access and also attached directly to the scanning computer to allow for speedy capture and image transfer. The other highly valuable feature of this storage device is something called RAID Level 1. RAID stands for Redundant Array of Independent Disks. RAID is a way of writing the data across two or more hard drives. If one of the hard drives fails, the other contains all of the data. There are various types of RAID configurations, but the simplest and the one we used is RAID Level 1, also known as disk mirroring. In this setup, we have two hard drives that contain identical data. Any data written to one hard drive is automatically copied to the other hard drive. It is simple and effective. In addition to RAID, we also back up the files to tape or whatever medium the Law School’s IT department uses.

At this point in the digitization process, we have created a digital image of one or more documents. These files are PDF files that are full-text searchable and are reasonable in size and sufficiently clear to be readable. The final step is to upload these documents into a digital repository. The repository allows for both storage of and access to the finished documents.

E. Creating a Digital Repository

At the 2011 AALL Annual Meeting, we collected information about the various repository solutions, all of which involved some cost and plenty of staff time to implement.
However, being part of a large university system was fortuitous for the project. The University of Colorado (CU) libraries recently formed a partnership with the Colorado State University (CSU) libraries to implement a digital repository from Ex Libris Corporation named Digitool⁶. By the time CU joined this partnership, CSU had done all of the hard work of installing and configuring the servers and software for Digitool.

Because this partnership consisted of a large committee of librarian technologists and the server was maintained by a library in Ft. Collins, Colorado, our library’s role was not oriented to implementing or maintaining server hardware. Instead our library was more involved with using the Digitool software and making recommendations about the design of the Digitool website which was ultimately titled the Digital Collections of Colorado⁷.

Robert Linz was assigned to the CSU-CU joint committee and assisted with final implementation and design of the repository website. It is a functional design and represents a compromise of the various interests of all of the member libraries. We made a number of compromises along the way, especially regarding how the Law Library was represented with the other university libraries. We contributed funds to the project but these fees were far less than purchasing a repository solution ourselves. On the whole the compromises were well worth the money and time saved by sharing the repository.

While it is necessary to have our documents published in a digital repository and important that users can access that repository to locate our documents, the reality is that most users will start their research in a search engine – and in particular, Google or Google Scholar. This situation means generally, our content is only as accessible as Google Scholar is successful in crawling it with their software.

⁷ Digital Collections of Colorado, available at http://digitool.library.colostate.edu/.
Google publishes an “inclusion guidelines” document for webmasters\textsuperscript{8}. It provides information about how Google crawls websites and how to most effectively tag and arrange content on a website. It is very important that repositories be able to natively implement Google Scholar’s rules so content can be discovered by Google Scholar. Google recommends a few different repository solutions in the inclusion guidelines document.

Initially, Digitool was not among Google’s recommended software packages. In fact, Google Scholar was not finding very many articles the Law Library loaded into Digitool. The CSU technology staff worked with staff from Ex Libris and Google Scholar, with the result that Ex Libris updated their software so that Digitool works better with Google Scholar. To test the indexing of repository documents in Google Scholar, we searched Google Scholar using titles of various documents in our repository, which is an approach recommended in Google’s guidelines document.

Beyond the Google Scholar issue, the biggest technical challenge for the Law Library was learning the Digitool software. This process entailed learning the language of repositories; the design of repositories; the concept of ingesting items; and how to add metadata to the uploaded documents. At this point, our Digital Services Librarian, Erik Beck, worked with our Metadata Services Librarian, Karen Selden to create the appropriate metadata for our materials.

\textbf{F. Metadata and Cataloging}

From the beginning of the project, Ms. Selden assumed she would need to learn Dublin Core or some other archival metadata scheme to describe the items that we planned to digitize. But we discovered from our colleagues at CSU that MARC metadata actually works best with the Digitool software. Our CSU colleagues also discovered that the process of adding metadata works best when the MARC metadata is

imported into Digitool rather than entered directly into the Digitool software. Consequently, Ms. Selden was able to use MARC – which is her native cataloging language -- to create typical bibliographic records in the library’s local Innovative Interfaces Millennium system -- which is her native cataloging habitat. This was a time saver for both Ms. Selden and the project as a whole.

Once Ms. Selden created the MARC bibliographic records in the local catalog, Mr. Beck used MarcEdit\(^9\) to convert the MARC bibliographic records into MARC Extensible Markup Language (MARC XML), which was then imported into Digitool. Once the metadata was imported into Digitool, the digitized item was imported into the Digitool software and attached to the Digitool bibliographic record. Finally, Mr. Beck created a unique Digitool URL for the digitized item, which was then added to the original MARC bibliographic record that was created in our local catalog. Interestingly, the metadata process for each digitized item began and ended with the MARC bibliographic record that was created in the local catalog.

To streamline the cataloging process, Ms. Selden created brief MARC bibliographic record templates in the local catalog for: (1) articles; (2) cases published in official West Reporters; (3) Congressional testimony; and (4) speeches. She created original bibliographic records in OCLC for legal briefs and the more traditional monographic items.

In our local catalog, Ms. Selden and her assistant Connie Fields added some specific fields to the bibliographic and item records. In the bibliographic records, they added as many as seven specific MARC fields. These included

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a. A 520 field containing an article or case summary, if one is available.

b. A 524 field for the citation to an article or brief.

c. A 540 field to identify items that are copyright protected.

d. A 590 field to explain that a physical item is a “Gift from David H. Getches and family.”

e. A 730 field containing a local uniform title to identify specific collections, such as the “Getches article collection;” the “Getches brief collection;” the “Getches case collection;” the “Getches hearing collection;” and the “Getches speech collection.” Ms. Selden also created local uniform title authority records for each of these collections. The local uniform titles make these collections easy to pull together into lists.

f. An 856 field containing the link to a digitized item’s bibliographic record in the Digitool repository.

g. A 970 field to create the electronic book plate mentioned earlier.

Ms. Fields also inserted a staff note into each item record that says “Getches donation” to identify the specific physical copies that were added to the collection via this donation.

G. Developing the User Experience

Our initial task was to collect, catalog, and digitize the materials for the David H. Getches Collection. As this process unfurled, we realized we needed to develop a website to serve as an interface both to search the collection and to promote and market the collection. With guidance from the Getches
Archives Committee, Erik Beck began to develop the David H. Getches Collection website\textsuperscript{10} in January, four months before unveiling the digital archive at the April symposium.

Initially, we chose to categorize items using four tabs: Publications, Speeches, Media, and Awards & Tributes. Under Publications, we display the bibliography. Within the bibliography, hotlinks lead directly from articles that we digitized to the article records in the Digital Collections of Colorado repository. From these records, one can view the pdf of the item. Each digitized article begins with the Law Library’s cover sheet, which includes a virtual bookplate, the citation for the article, and any copyright information. For articles that use HeinOnline’s digital content, the Law Library’s cover sheet is followed by HeinOnline’s cover sheet.

The Publications tab also contains a Featured Publications section. The content in this section will change over time as we digitize more content. Currently, the featured publications include some more difficult to locate works, such as the \textit{“Indian Courts & the Future Report”}\textsuperscript{11}, and some of Dean Getches’ most influential scholarship, such as his most cited article on Indian Law\textsuperscript{12}.

The Speeches tab contains pdfs of the transcripts of many of Dean Getches’ speeches, as well as some video clips of him delivering the speeches.

The Media tab, displayed photographs depicting both the Dean’s professional and personal lives, as well as videos, which currently are all various tributes to Dean Getches.

Finally, the Awards & Tributes tab is self-explanatory, containing a mixture of written tributes and certificates, awarded throughout the Dean’s career and posthumously.

\textsuperscript{10} David H. Getches Collection website, available at http://wiselawlibrary.org/library_services/digital_collections/getches_collection/.


In the months following the symposium, we continued to add content to the digital repository, such as hearings, cases and briefs, and to collect more photos and awards. We also continued to refine our vision of the website. We decided to replace the Media tab and the Awards & Tributes tab with a Litigation tab. The new Litigation tab features the hearings, cases and briefs that were added to the digital repository. The digital content available via the updated website includes hearing transcripts, speech transcripts, cases from West Reporters, approximately 50 briefs, and nearly 60 articles. We also plan to add a separate Biography page to the website, which will incorporate the information formerly housed in the Media tab and the Awards & Tributes tab, as well as any other appropriate information. The Biography page will use a timeline approach to present this information.

**Part III – Reflections on the Process and Lessons Learned**

When we began the process in July 2011, our main concern was how to accomplish this project on schedule. As we held planning meetings and developed checklists throughout the process, we learned a number of lessons we did not initially anticipate.

First, libraries should consider local resources to help with digital projects. As just a few examples, the Law Library used the expertise of our four CU sister libraries to help with drafting the Archive Agreement form with the Getches family. The Law Library also became active in the CU/CSU Digitool Digital Repository Consortium and our Metadata Services Librarian became a member of the CU/CSU Archives Affinity Group to become familiar with the issues facing both digital and physical archives in our local institutions.

Second, highly functional teams are critical for a digital project to succeed. The Law Library could not have accomplished all the many facets of this complex project without the combined contributions – both big and small – and the expertise of every person who works in the library. Fortunately, Dean
Getches was such a beloved figure and our library faculty and staff are such a terrific group of team players, there was never any problem obtaining buy-in from every person who works in the library. This leads to a corollary lesson: as a group, often you can do more than you think possible. To create a robust, local repository while simultaneously learning how to contribute to a consortial repository was an ambitious goal.

Third, as we learned from the copyright permissions process, it pays to be organized and diligent. The Law Library relied on successful, experienced project managers and created detailed timelines, spreadsheets, task lists, work slips, and checklists to keep all of the work processes flowing in an organized and timely manner. By using these methods, the Law Library achieved its initial goal without much rushing or panic in the final weeks and days leading up to the deadline.

Fourth, set realistic and achievable goals. The Law Library focused on digitizing only a select few items for the symposium, because we acknowledged from the start that this archive would be an evolving project and process. We also realized that digitizing these select few items would serve as a great learning opportunity for the entire library staff, and that targeting the symposium for the unveiling offered a concrete deadline to keep our efforts focused and on track.

Fifth, if possible, it is preferable to have a “big picture” view of the project at the start. For example, late in the spring semester of 2012, the Law Library was informed that there were 50 boxes containing Dean Getches’ files still residing in an empty office in the law school, and the boxes needed to be relocated to the library to accommodate a new faculty member. As soon as the Law Library learned about the files, we knew that we would eventually need to hire an experienced -- or INTENTIONAL -- archivist on a contract basis to properly process those particular items. If we had known from the beginning, in July 2011, about those additional materials, we would have set aside many of the more “ephemera” pieces from the original physical donation for processing by an expert.
Sixth, take advantage of this opportunity to highlight the value of the library. In retrospect, the Law Library was very fortunate that the David H. Getches memorial symposium served as both a target date and a very high profile venue to launch the website. While the Law Library was sincerely happy to pay tribute to Dean Getches, this was also a wonderful opportunity to showcase the Law Library’s skills, talents, and services, and to do so in front of an audience that consisted of Colorado Law’s own faculty and new dean, as well as world-renowned scholars in three key subject areas of Colorado Law’s curriculum. The opportunity this symposium afforded the Law Library was a chance to perform some very savvy marketing. With this goal of marketing in mind, Law Library Director Susan Nevelow Mart used the 15 minute timeslot she was allotted during the David H. Getches memorial symposium to introduce and showcase the David H. Getches Collection website. She gave a wonderful introduction, which elicited both laughs and a few tears from the invited scholars, judges, practitioner, and Getches family members who attended. Then, she dramatically opened a big red velvet curtain displayed on the large projection screen to reveal the website’s homepage and commence a tour of its features. Never underestimate the amount of goodwill a well-crafted 15 minute presentation can create.

Conclusion

While the Law Library continues to add content to the David H. Getches digital collection and update the associated website, we also are applying the lessons we learned toward creating more digital collections. For example, the Law Library recently created its second website and digital archive, to commemorate the June 2013 50th anniversary of the Arizona v. California United States Supreme Court ruling. Once again, the Law Library’s Director was invited to unveil the digital archive and its website during a conference devoted to celebrating the anniversary of that case. The conference was held at

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13 Available at http://lawlibrary.colorado.edu/arizona-v-california-collection.
Colorado Law and sponsored by Colorado Law’s Getches- Wilkinson Center for Natural Resources, Energy and the Environment. Again, this proved to be a wonderful opportunity to market the Law Library and its services and expertise to important Colorado Law constituents. Other digital projects in progress at the Law Library include an institutional repository of Colorado Law’s scholarship, as well as a digital archive of historical Colorado legal materials such as briefs, session laws, and codes. As library patrons increasingly expect materials to be available digitally, libraries must learn how to digitize collections and be active participants in the digital world.

Additionally, digital projects provide new and expanded opportunities for technical services librarians and staff. Learning the digitization process; using new repository software to store both digital items and the associated metadata; creating new workflows to process digital items and metadata; learning new metadata schemas; and populating metadata into new storage mediums, such as Drupal webpages, are each professional development experiences of value to professional and paraprofessional staff alike. Digital projects expand the technical services team beyond servicing just the local library’s catalog. Indeed, the Law Library’s experience creating digital archives was the impetus for changing the Catalog Librarian’s title to Metadata Services Librarian.

Finally, digital projects can be leveraged to maximize value to many and various law school constituents. In this competitive law school market, digital projects possess a great deal of marketing value that the law school administration can use to promote the value of the institution to donors, alumni, bench, and bar. Both the David H. Getches Collection and the Arizona v. California Collection are examples of projects that have value well beyond the immediate Law School environment. In addition to alerting law school administrators to completed and potential digital projects, reach out to various departments and

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14 Available at http://www.colorado.edu/law/research/gwc.
programs within the law school with suggestions about partnering on projects that can help them fulfill their goals and objectives. Again, the Arizona v. California Collection is a perfect example of this sort of a successful partnership. Digital archive projects not only showcase the project management and technological skills of the library staff, they also demonstrate to the wider legal community the commitment of the law school to the smart use of technology.