

arly digitization projects were designed to determine how to best digitize materials for artifactual fidelity—that is, how to make the best reproductions. There were no guidelines for what standards to use or what equipment to use at that time. The internet was in its infancy. Workflows and preservation plans were modeled on prior work microfilming materials.

Perhaps the most notable foundational digital library project at UF was the Caribbean Newspaper Imaging Project, funded by Andrew W. Mellon Foundation. The project tested means and methods for digitizing historic and current Caribbean newspapers. Because the World Wide Web was also still experimental at the time, the Libraries planned to create massive Compact Disc (CD) sets as the means for distribution. Because the work focused on materials in the Latin American and Caribbean Collections (LACC), then on the top floor of the Smathers Library, digitization began in this attic space. Thus, the University of Florida Digital Collection (UFDC), a collection that now exceeds 15 million pages, began in borrowed office space and with repurposed cameras, curtains, and improvised lighting.



Eagle

As the repository for newspapers from Florida and the Caribbean, UF's digitization activities developed in relation to newspaper needs.

In partnership with the University of the Virgin Islands and University of Puerto Rico, since 2013 UF has been awarded a series of five major grants from the National Endowment for the Humanities to digitize 500,000 pages of newspapers from Florida, Puerto Rico, and the US Virgin Islands.

https://www.ufdc.ufl.edu/ufndnp

ITEMS

The Libraries began experimenting with digitization in the 1990s.

On July 1, 1999, the Libraries established the Digital Library Center (DLC) —a unit to manage the Libraries development of digital collections through digitization. This built upon the growing demands for rare material preservation and access and acknowledged new possibilities from the then-new World Wide Web. The Digital Library Center occupied a spacious North Wing reading room built in the post-World War II expansion of the Smathers Library. While a lovely space, the reading room was not ideal for digital work. The room featured large windows, ideal light for studying, not to mention air circulation prior to air conditioning. The windows, however, necessitated continuously closed blinds for optimal lighting for digitization. The architects of the 1940s had not planned for the variety of scanners, computers, and other equipment that soon filled the space.

Despite these challenges, it was home for the new DLC, and adjacent to the rare collections most critically in need of digitization. A signature event for this period was a series of awarded grants, totaling over one million dollars, for the Baldwin Library of Historical Children's Literature. Prior to digitization, microfilming was standard practice. A series of three grants from the National Endowment for the Humanities jump-started digitization of the Baldwin collection, with 6,547 volumes now available online and preserved forever in digital form. While working on this series of grants, the DLC's space remained in start-up condition, complete with wires crisscrossing the floor. Curators and collection managers quickly saw the benefits of having fragile materials made available online and demand rapidly

outstripped capacity—in terms of space, staffing and equipment.

Despite serious limitations, rare and historic library materials were in high demand, and there was a critical imperative to digitize materials for preservation and many brittle materials throughout UF's collections, so the Libraries added staff and equipment, ambitiously growing digitization activities and developing techniques and practices. On April 21, 2006, the Libraries launched the UF Digital Collections (UFDC). This was necessary to provide rapid public access to the content produced through a growing number of grants, including grants that founded the Digital Library of the Caribbean (dLOC) and the Florida Digital Newspaper Library. Despite the limitations, thanks to the DLC and a growing grants program, the Smathers Libraries had become a leader in the emerging field of collection digitization.

In 2012, the Digital Library Center (now known as the Digital Support Services Department) moved to a larger, modern space in the Interim Library Facility (ILF)—located near the Gainesville Airport. With enough power and data plugs and a large interior space with very few windows, ILF provided a much more suitable environment for digital work. Cradle and Copi-Book scanners shared a room but with enough space between them for staff members to work comfortably. The addition of LED lighting improved the environment by reducing the amount of heat generated by equipment. Large format scanning had its own room, which allowed for precise light level control. Meanwhile, there were offices for staff and space where newspapers and archival materials of various shapes and sizes could be safely

Digitization through the Years



UF began digitizing newspapers instead of microfilming in 2005. The process was difficult, and the newspapers began to stack up.



To have the newspapers lie flat and fit on scanners, required cutting them with a machete into single pages.



Student places a newspaper on the scanner.



Students cropping and cleaning up digital images.

DIGITAL ARCHIVING

In the early days of digitization, experiments for digital preservation recommended archiving by burning files to Compact Disc (CD, and later DVD). UF had a collection of over 25,000 discs of preservation files. Preservation standards indicated that files on these discs would likely only last a few years, and would then need to be copied to new discs. This workflow was unsustainable, especially with new files needing preservation each day. The Libraries transitioned to using a robotic tape archive at UF for the local repository files. Additionally, the statewide group established the Florida Digital Archive, which also supported preservation files.

By 2019, with ongoing and rapid growth, the UF Digital Collections holdings represented the vast majority of the statewide Florida Digital Archive. When the Florida Digital Archive closed in 2019, UF established its own digital archive, UFAR (pronounced U-FAR, for UF Archive) utilizing new UF cloud storage offerings for less frequently accessed materials. Future work will integrate workflows and ensure appropriate redundancy for the tape and cloud holdings for preservation.



The Baldwin's historical children's literature represent early digitization work, and digitization is ongoing for these rare and fragile volumes.

stored. Moving away from campus meant that most of the materials heading for DSS had to be transported from the main library. This necessitated additional lead-time for projects, as "shipping and handling" became a factor. However, proximity to the Preservation and Conservation unit, located literally in the next room, meant that materials follow an easy physical workflow from check-in to physical review for damage to scanning queue. One major hurdle to overcome was the loss of campus infrastructure when it came to internet access. Processing images requires moving very large files back and forth between systems. Being off-campus meant relying on commercial options. Over the first couple of years, "slow internet" was a real issue for production. It took some experimentation, but we were finally able to get a big enough "pipe" turned on for our needs.

Now remote from campus, rather than relying on a cadre of student workers, Digital Support Services has a team of twenty full-time staff using a dozen different types of scanners and cameras to digitize an average of 20,000 pages a month. The team also ingests content produced by partners and vendors for grant projects, shares content with Hathi-Trust and the US Government Printing Office, and works to bring past metadata records and optical character recognition (OCR) files up to modern standards. Regular users of the UFDC site find about 100,000 new pages a month, ranging from current and historic newspaper issues to moveable pop-up books to rare Cuban monographs and maps.

The Digital Library and the UF Digital Collections evolved rapidly, providing a catalyst for new library programs. Greater expertise in digital technologies combined with the collections themselves translated naturally to online exhibits and informed the creation of the Libraries Exhibits Program. Early experiments with how to contextualize the UF Digital Collections informed various digital humanities and data management programs at UF while critical work on copyright and permissions informed developments at UF in scholarly communications. Today the UF Digital Collections boast hundreds of collections, millions of pages, and countless stories of impact: from a woman seeing her grandfather for the first time—thanks to a digitized Boy Scouts scrapbook—to a unique manuscript from Haiti shared by researchers worldwide, to this year's cutting-edge research with the newest dissertations, and more. Digital Support Services has resided in many spaces in the libraries; however, the most important has been the virtual space it continues to fill in the UF Digital Collection.

¹https://news.ufl.edu/archive/2006/04/uf-digital-collections-web-site-debuts-1.html