

Integrating and Supporting Digital Production at the University of Illinois Libraries: A Proposal and Interim Plan

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At the request of Dean Wilkin, this proposal recommends a unification of digital production within the Library and provides the program with the necessary leadership to advance this critical library service. The future of digitization in the University Library will depend on strong foundations in three areas: digital production, access, and preservation and the strong collaboration and planning between these functions. The future directives for preservation have recently been addressed by the Digital Repository Management Team's report, and it is understood that a similar report making recommendations for access is underway.

This proposal is submitted after extensive discussions with twenty-four professionals in a variety of academic positions throughout the University Library that intersect with digital production either directly or indirectly as well as review of digitization efforts in peer academic libraries.

Overview

The UIUC Library's digital reformatting activities have developed significantly over the past 15 years, with largely centralized digital production starting within the Digital Imaging Media Technology Initiative project funded through various IMLS grants (DIMTI, ca. 1998 – 2003), later developing into the Library's Digital Services Department (DSD, ca. 2003 – 2008) and currently in the Digital Content Creation Unit led by Betsy Kruger (DCC, ca. 2008 – present). While DCC is the primary Library resource for in-house digitization of documents, monographs, maps, microfiche, and other image collections (largely, but not exclusively from special collections), not all digitization takes place centrally. Preservation undertakes in-house and vended reformatting of monographs, newspapers, audio, moving image, and born digital collections for preservation and access purposes, the History Philosophy and Newspaper Library oversees vended newspaper digitization from paper and film, primarily through the National Digital Newspaper Project grant, and general book collections are digitized in partnership with the Internet Archive, which maintains a local scanning center, as well as through participation in the Google Book Project. While some cross-over has occurred between these initiatives, many of these programs have largely operated independent of one another.

Within the past year, however, all units/projects have taken steps to bring their operations into closer alignment, including:

- Developing common imaging and packaging standards for the ingest of DCC and Brittle Books (Preservation) content into HathiTrust;

- Sharing a 50% graduate assistant between Preservation and DCC to improve upon coordinating areas of shared workflows;
- Moving Preservation's physical location from the basement of the Library to just across the corridor from DCC on the 4th floor which facilitates communication and staff sharing;
- Transitioning administration of any newspaper reformatting outside of the NDNP project from HPNL to Preservation and beginning formal discussions with Preservation, the AUL for collections, HPNL and IT about newspaper digitization post-NDNP in collaboration with the Illinois State Library;
- Developing, through the Google Books project and a shared candidate list, workflows for digitization that span Conservation, Preservation, DCC, the Internet Archive, and vendor services;
- Beginning discussions about merging workflow tracking for DCC, IA and Preservation/Conservation into a single interface;
- Development of a packaging format for submission and ingest of born-digital/digitized content from University Archives, Student Life and Culture and Sousa Archives into Medusa.

Proposed Changes

The current, dispersed model of digital production should be unified into a single point of contact, ideally situated within a larger program which also supports the digital content lifecycle and facilitates communication and selection of content with units around the Library. Given the pending retirements of both Betsy Kruger (Head, DCC) and Annette Morris (Digital Reformatting Coordinator, Preservation), some flexibility in the development of a new staffing model is easily possible. In summary, we propose to move the current digital production efforts offered by DCC and HPNL into the Preservation Unit and, through two newly conceptualized academic positions and realigned responsibilities of existing Library staff, put in place a team that will lead the University Library forward towards a more unified, functional, and consistent approach for digital production. Additionally, centralizing the Library's digital production in Preservation will simplify file management and workflows related to repository services, enhancing the work undertaken by the Digital Repository Management Team (DRMT).

Academic Staff: DCC will continue to serve as the main provider of in-house digitization of book, manuscript, and image materials from the Library's special collections units and the general collections. The new faculty member in DCC would be the *Digital Collections Librarian*. This position would develop priorities for identifying and prioritizing digitized content based on a strong incoming knowledge of digital collection development and user access; investigate granting opportunities to fund further research and development in the area of digital library content; and develop guidelines for how our in-house digitization efforts blend with or are augmented by those identified for the Internet Archive and the Google Book Project (or any future large scale digitization efforts), as well as serve as the primary Library contact for collaboration with large scale digitization efforts such as the Internet Archive and Google Books. This faculty position would in turn report to the Head of Preservation and Conservation. Day-to-day production operations would be managed by Angela Waarala (thus increasing her position's responsibility) who would report to the new *Digital Collections Librarian*. It is also proposed that Kirk Hess's position (with proposed title change to *Digital Content Specialist*) be realigned

and be moved to work directly in support of larger digital production, preservation, and access needs. This re-conceptualized position would support file processing and workflow improvements necessary within DCC and between DCC and both the DRMT and final access points/teams, as well as assist with the workflow management of file preparations for locally generated content to be ingested into the HathiTrust. This position would report to the *Preservation Librarian*, Kyle Rimkus, while working alongside DCC and maintaining strong collaborative relationships with IT.

Support Staff: One of the biggest challenges faced by DCC currently is the lack of permanent personnel funds beyond the two academic positions. DCC maintains five support positions, all currently funded as academic hourlies. As digital production is a universally recognized core function of the Library, the Library should support this operation with permanent civil service staff lines, as it will result in better staff retention and development and illustrate the permanent commitment to staffing digitization production.

Establish Liaisons and Collaborative Team Building: Strong affinities exist between DCC and both the Library IT and metadata creation in CAM, as well as preservation, conservation, and the DRMT. It is strongly recommended that formal liaisons be defined with a metadata librarian as well as in IT WNS and IMS staff persons, and the DRMT. These liaisons have already been informally established with MJ Han and Eric Mosher and since they both have a significant level of understanding, they should be strongly considered for these more formal relationships with DCC in the future. These liaisons should then work to build a collaborative team functioning to strengthen digital production over the entire library, similar to the DRMT, proposed, henceforth as the Digital Production Team (DPT).

Newspaper digitization and other vendor-produced digital content, whether from original content or microfilm, is currently largely derived from brittle originals or previously microfilmed content, but this should be expanded with selection guidelines established in collaboration with the *Digital Collections Librarian*. This workflow should also be consolidated into the Preservation Unit, which has largely already taken place on a more ad hoc basis. [NOTE: this proposal does not incorporate the existing Digital Newspaper Project grant with the NEH, though if the grant is resubmitted for 2015-2017 a closer alignment should be considered.] The re-conceptualized position of *Digital Reformatting Coordinator* (formerly the *Preservation Reformatting Coordinator*) would manage all outsourced production of digital content from physical originals, as well as the transfer of that content into various access platforms. This AP position would manage workflows related to the pending project funded by the Illinois State Library to digitize newspaper content from microfilm (a project being developed as a next-stage digitization project beyond the NDNP), brittle book digitization, as well as outsourced digitization of any other general collections content identified through other means (such as by the Google Book Project) with third party vendors. This position will shift from previously reporting to the *Preservation Librarian* (Kyle Rimkus), to report to the new *Digital Collections Librarian* but will collaborate closely with the Kyle Rimkus and Kirk Hess, and serve as a member of the DPT.

Involvement in other library digitization projects: There will continue to be grant-funded projects involving digitization that are developed and managed outside the scope of the staffing outlined

here. However, by centralizing digital production services and preservation into one unit, communications and planning for support with potential grant writers will be streamlined.

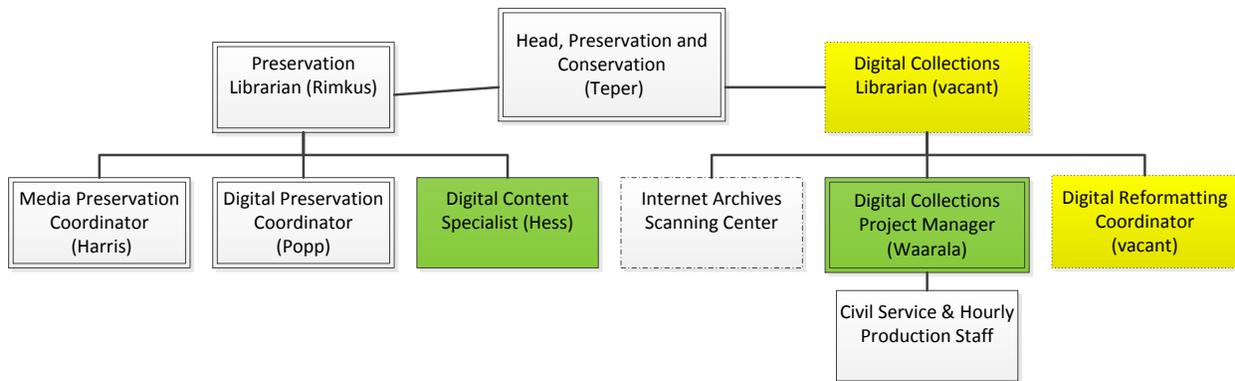
Ancillary support in Library units: Although outside the scope of this proposal, it should be noted that a goal of these recommendations is to increase the productivity and output of DCC. It was noted in the interviews with various units that staffing assistance may be required in their units should the need for source materials increase due to increased efficiency. Although this plan does not provide a solution, it is suggested that the new *Digital Collections Librarian* and the DPT look creatively and collaboratively at ways that this bottleneck may be addressed.

Rationale

Rolling the new *Digital Collections Librarian*, current DCC staffing, and Kirk Hess's position under Preservation management will allow the newly formed DPT to focus on improving the areas determined to be in the greatest need, while having the higher administrative responsibilities of running a unit taken care of by an experienced unit head. The newly appointed DPT (including the collaborative liaisons with other units as described earlier) would then focus their efforts in the near term on areas including:

- Workflow efficiencies, both in image capture, equipment management, and file processing;
- Strengthening the relationship and workflows between special collections curators, subject specialists, and the collections they hold with the developing digital library content;
- Developing clear priorities for identifying and prioritizing digitized content from both general and special collections;
- Investigating granting opportunities to fund further research and development in the area of digital library content;
- Reviewing current funding scenarios and developing a more stable funding model proposal, including use of collections and state operating funds;
- Establishing an equipment replacement plan and developing a budget to support ongoing equipment purchases and maintenance;
- More clearly developing guidelines for how our in-house digitization efforts blend with or are augmented by those identified for the Internet Archive and the Google Book Project (or any future large scale digitization efforts)
- Developing clearer and more expedient workflows to move projects from image capture to appropriate access platforms.

Proposed Staffing Model



Budget Implications

- The two proposed new academic positions (*Digital Collections Librarian* and *Digital Reformatting Coordinator*) can be funded by the lapsing salaries from the retirements of Betsy Kruger and Annette Morris.
 - Digital Collections Librarian (Faculty, previously Betsy Kruger) proposed salary range of \$55,000-\$70,000
 - Digital Reformatting Coordinator (AP, was Annette Morris) proposed salary range of \$50,000-\$65,000

- Pay increase for Angela Waarala reflective of her increased responsibility, should also be available by the two lapsed salaries, which will bring her salary in line with other permanent APs in Preservation.
 - Digital Collections Project Manager (AP, currently Angela Waarala)

- A small recurring supply budget of \$5,000 is also requested for recurring supply needs such as toner and paper (currently paid for out of DCC cost recovery or gift funds)

- Perhaps most significantly, the shift of support staff from an exclusively hourly to a majority civil service model will significantly change current funding models. Currently, DCC is funded off of carryover funds through the Library IT Fee allocation. Few, but some, Library civil service positions are paid off the IT fee, so this precedent has been laid. However, recurring funds would need to be established that were directed towards these positions, moving away from the year-by-year model funding currently in place. It is suggested that permanent positions be incorporated gradually, perhaps one per year over a series of years. For reference, there is one Civil Service series, that of *Digital Imaging Specialist*, whose class specifications are close to what is required by the current hourly positions (<https://www.sucss.illinois.gov/specs/detail.aspx?ID=2835&osm=c19>). For hourly rate comparisons, see *Figure 1*, below.

	Minimum Hourly Rate	Midpoint Hourly Rate	Maximum Hourly Rate	Effective Date
Digital Imaging Specialist II	\$17.33	\$25.14	\$32.94	8/19/2012
Digital Imaging Specialist I	\$15.30	\$22.28	\$29.26	9/1/2013

Figure 1: Salary ranges for Civil Service *Digital Imaging Specialist* series. For reference, current DCC hourly employees make from \$17-\$22/hr.

- Currently, DCC is allocated \$138,320 in funds for hourly wages, with rates ranging from \$17-\$22/hr. If two FTE positions were made into civil service at the Digital Imaging Specialist II and one at the Digital Imaging Specialist I within the recommended 10% range above the minimum hourly rate (per recommendation by Skye Arseneau) starting rates for the two levels would be about \$19.42 and \$16.83 per hour, respectively. As IT Fee monies are part of the State budget, benefits for these positions would be picked up by the state, resulting in no significant change in the annual allocation of support staff funds for DCC except that permanent funding lines would be required instead of end-of-year funds.

Draft Job Responsibilities (not meant to be comprehensive at this time)

Digital Collections Librarian (Faculty, previously Betsy Kruger)

Reporting to the Head of Preservation and Conservation this position leads the Digital Content Creation program and serves as leader of the Digital Production Team (DPT). The incumbent would:

- Lead the DPT, including oversight of DCC, but also oversee coordination of metadata and access systems with identified staff in IT and CAM;
- Develop clear priorities for identifying and prioritizing digitized content from special and general collections, focusing on the development of a more cohesive overall digital library collection;
- Investigate granting opportunities to fund further research and development in the area of digital library content;
- Oversee DCC funds and manage budget development;
- More clearly develop guidelines for how our in-house digitization efforts blend with or are augmented by those identified for the Internet Archive and the Google Book Project (or any future large scale digitization efforts);
- Manage, coordinate agreements, selection and workflows for large scale digitization agreements with third parties, such as the Internet Archive and the Google Book Search Project, establishing quality control practices as relevant;
- Develop and manage budgets related to digital production;
- Liaison with the Internet Archive for annual sole source submission, invoice approval, scanning rate changes, facilities issues, etc.;

- Supervise academic staffing in DCC;
- Work with selectors and campus faculty members, as needed, to identify collections suitable for digitization through both in house and third party vendor/partner options;
- Oversee copyright and access issues related to digitized content, including gaining permission to digitize copyrighted materials when necessary;
- Serve as an active partner/leader in digital content projects outside of the University Library, including, but not limited to Artstor Shared Shelf, ContentDM, DPLA, HathiTrust, Internet Archive, Biodiversity Heritage Library, etc.

Digital Collections Project Manager (AP, currently Angela Waarala)

Reporting to the Digital Collections Librarian, the Digital Collections Project Manager is responsible for the supervision of Library staff who are digitally reformatting a large variety of unique paper-based and microform collections, as well as three-dimensional objects, held in the collections of the University Library. This position also oversees the fulfillment of patron requests for digital reproductions from the Library's collections. The incumbent would:

- Develop workflow efficiencies, both in image capture, equipment management, and file processing;
- Hire, train, and supervise staff that perform digital reformatting and post-capture processing in accordance with Library developed best practices for digital reformatting, digital file management, and optical character recognition;
- Develop and maintain project schedules and communicated with stakeholders on project progress;
- Oversee communication, reproduction, and invoicing activities related to patron requests.
- Oversee quality control inspection of digital files produced by in-house staff;
- Lead selection of appropriate equipment and software, in consultation with the Digital Collections Librarian;
- Work with IT staff and vendors to ensure that scanning equipment is routinely calibrated and maintained;
- Maintain production statistics;
- Research new and appropriate equipment for DCC with input from IT with consideration of institutional resources, storage and staffing needs, budgeting for replacement and how the various types of equipment impact the library's digitization program;
- With the Digital Collections Librarian, and DPT, develop better tools and processes for the digital workflows, data management, handling procedures and schedules to ensure efficient and accurate completion of the projects.

Digital Reformatting Coordinator (AP, was Annette Morris)

Reporting to the Digital Collections Librarian, the Digital Reformatting Coordinator manages collaborative digital production workflows across multiple units in the library to ensure the efficient and timely completion of digital reformatting projects, ingest into access systems, and transfer to Medusa for long-term preservation. The incumbent would:

- Supervise outsourced digital reformatting activities directly related to bound and unbound library materials;

- With the Digital Collections Librarian, assist content owners identifying and planning digital reformatting projects appropriate for outsourced services and lead their implementation;
- Track outsourced digital projects through workflow stages to ensure coordination between vendors responsible for digital production, metadata creation, and ingest into appropriate access and digital preservation systems;
- Hire, train, and supervise hourly staff that prepare materials for outsourced digitization (including repairs);
- Develop and maintain project schedules and communicate with stakeholders on project progress;
- Oversee communication, reproduction, and invoicing activities related to vended services;
- Oversee quality control inspection of digital files produced by vendors;
- Manage outsourced digital production budget;
- Maintain production statistics.

Digital Content Specialist (AP, currently Kirk Hess)

Reporting to the Preservation Librarian, the Digital Content Specialist will assist with the planning, implementation and ongoing production of the Library's digital collections and initiatives, with particular emphasis on project design, digitization workflows, and transfer into content and delivery systems. Content would include, but is not limited to, preservation content such as digitized newspapers and brittle books, as well as digital content created locally or by vendors for access and distribution purposes. Access systems would include, but are not limited to, Content DM, HathiTrust, Veridian, and locally developed access systems. The incumbent would:

- Develop clearer and more expedient workflows to move projects from image capture to appropriate access platforms;
- Create, or oversee the creation of, submission packages for the HathiTrust and develop scripts to further streamline certain HathiTrust ingest related work;
- Collaborate with and serve as primary liaison between IT and the Digital Production Team;
- Provide technical leadership to newspaper digitization initiatives;
- Serve on HathiTrust Research Center initiatives and other research projects related to production of and access to digitized collections.

Interim Plan for transition of DCC Management November 2014- December 2015

Betsy Kruger, Head of Digital Content Creation will retire in November 2014, and Annette Morris, Preservation Reformatting Coordinator, retired July 2014, leaving a significant gap in the Library's management of digitization services. Given the importance of improving digitization as underscored by participants in the library's 2014 all-staff "un-retreat," Preservation intends to propose reopening the lines vacated by Kruger and Morris in the February 2015 hiring plan. If this request is approved, a realistic timeline could be as long as: propose new positions (October

2014), post new positions (March 2015), hire new people (September 2015), get them started (January 2016).

Realistically, we should expect to make do without both of these positions for all of 2015. In the interim, existing staff will have to shoulder some of the extra burden, assisted by temporary staff, preferably in the form of a 50% Graduate Assistant. Primary staff affected include the Head of Preservation and Conservation, Jennifer Teper, Preservation Librarian, Kyle Rimkus, and Digital Collection Project Manager, Angela Waarala. As an interim plan, we recommend:

- Waarala will serve as interim Head of DCC for continuity of services;
- Teper will take over fiscal oversight of DCC's budget and manage IA and Google administrative responsibilities;
- Transition Kirk Hess to report to Kyle Rimkus during this period to assist with technical oversight of preparation and transfer of digital content, in collaboration with Waarala;
- Appoint two additional academic/grad hourly (20 hours/week each, approx. \$20/hr) positions to the unit for one year's time, from January 2015 to January 2016.
 - The first (supervised by Waarala) to assist with administrative and production responsibilities in DCC during the transitional period.
 - The second (supervised by current preservation graduate assistant, Molly Wayne) to assist with vended reformatting services currently undertaken through Brittle Books, Newspapers, and the Google Books projects and HathiTrust packaging for DCC content.

We envision the following breakdown of new responsibilities to get us through this period:

Jennifer Teper	Kyle Rimkus	Angela Waarala	Kirk Hess	Preservation GA Molly Wayne	Grad/Acad Houly [<i>new request</i>]	Grad/Acad Houly [<i>new request</i>]
Final budgetary oversight over DCC operations Administrative oversight of Internet Archive partnership	Oversight of transition of Kirk Hess to support digital production and ingest protocols Oversight of preservation reformatting operations (Molly Wayne)	Interim head of DCC, reporting to Teper Represent DCC in strategic efforts with IT and external partners, in collaboration with Rimkus and Hess Operational budgetary oversight Supervisory authority over DCC operations	(responsibilities as described above)	Brittle Books workflow management Newspaper reformatting management HathiTrust packaging DCC imaging support	reformatting and file management assistance assist Internet Archive, Google Books, and HathiTrust digitization projects as needed	reformatting production assistance