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Collaboration is an increasingly popular trend in libraries, archives, and museums.  Whether projects make use of limited resources by pooling them or share the expense of building new resources, funding agencies are encouraging organizations to work together.  However the study of collaboration in a library complex lags behind these opportunities.  This case study takes an in-depth look into the tools, processes, and structures employed by a multi-institutional project planning group through interviews and examining documentation.  The particular planning project studied here resulted from an administrative mandate and proceeded with the full support of an established consortial arrangement.  The purpose of the study was to unveil factors and behaviors that facilitate successful collaboration under friendly circumstances.  It explores the coordination processes involved when project planning participants have different roles, goals, and responsibilities.

Headings

Libraries -- Special Collections.

Collaboration for the Advancement of College Teaching & Learning

Group work in research -- United States.

Organizational effectiveness.

A CASE STUDY OF THE PLANNING OF A LARGE-SCALE COLLABORATIVE DIGITIZATION PROJECT BETWEEN SPECIAL COLLECTIONS LIBRARIES AND ARCHIVES IN AN ESTABLISHED CONSORTIUM

by
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**Introduction**

Archivists cannot collect or digitize everything, but through cooperation and collaboration, they can achieve more together than they could individually. This is becoming ever more apparent in the Library and Information Science (LIS) community – and especially in archives – where funding purse strings have tightened even as users demand more and more content online. Special collections have long been proponents of cooperative collection development, but digitization projects have remained largely individual. There are, however, notable exceptions to this of late. Cornell University recently digitized founding documents and university records for ten Historically Black Colleges and Universities (HBCUs), including North Carolina Central University (NCCU). In 2009, the Institute of Museum and Library Services (IMLS) produced a document highlighting some of the most successful collaborative grants they funded in the previous years. Among those was a project in South Carolina to highlight the history of World War I in the state; the South Carolina State Museum and other cultural institutions teamed up to create programs and a web presence (Kulpinski, p. 29). At the University of North Carolina at Chapel Hill (UNCCH), the North Carolina Digital Heritage Center currently assists cultural institutions with digitizing their hidden treasures. However, all of these projects have been high-touch, curated projects. And in each, materials were sent to one central location for digitization. Large-scale digitization projects have coupled industry and public institutions, such as the Google Book Project and MS Live Search, but do not create sustainable infrastructure in the libraries.

Collaboration between public institutions is an increasingly important topic for study in library and information science (LIS). Indeed, though they do not require partners for all applicants for their National Leadership Grants, IMLS advertises that "carefully chosen partners with complementary competencies and resources can create powerful synergies that extend project impact" (Grant Opportunities, 2008, p. 12). Yet there has been a notable lack of study in the area. This is partly because the population of potential samples is limited, so focusing intensely on individual cases provides the best opportunity for increased insight at present. The project under examination for this study represents both a large scale – it plans to create 400,000 digital objects over three years – and a high level of partner equality and cooperation, making it an ideal case for study for exploring coordination mechanisms. The goal of this research is to understand how truly collaborative, multi-institutional project planning processes work through examining the coordination of one innovative and ambitious attempt.

The lack of collaborative digitization projects, specifically those involving several organizations or institutions, makes case studies the most appropriate form of studying the involved coordination processes at present. This research is a case study of the planning process for a large-scale collaborative digitization grant project. The project in question is unique for several reasons, the first being its large scale. The project proposes to digitize 38 entire collections or record groups from special collections at each of four university libraries in an established consortium. This volume – approximately 400,000 digital objects – is extremely ambitious on its own. However, the project will accomplish this by taking advantage of specialized digital production centers at three of these university libraries, relying on the successful coordination of existing technology. Indeed coordination is the primary focus of the project. Once digitized, materials will be returned to home institutions, which will then host and present the resulting digital objects. A consortial search platform already exists that will make

the digital collections discoverable, but returning the digital content to home institutions bounds the scope of the project.  The grant proposal seeking funding was submitted on February 16, 2011, and included a detailed three-year plan and budget for accomplishing these goals.  Because the project is not feasible without grant support, the grant application – and the process that led to it – required representatives from these four university libraries to reach a consensus on the entire plan in advance of this submission.  Beyond large volume and grant funding, the materials are manuscript collections from the twentieth century and it is likely that some will be under copyright still.  All of these factors create high pressure and high stakes and make the project an ideal case study of coordination.  For the purposes of this study, the university libraries will be referred to as Alpha, Beta, Gamma, and Delta; the consortium will be Alpha-Beta-Gamma-Delta, or ABGD; and the project will be Collaborative Large-Scale Digitization, or CLSD.

By surveying participants in CLSD, the researcher hopes to see how they intersect to form successful collaborations and inform future attempts.  Successful collaborations can have a positive impact on organizations long after the projects end (Rodger et al., 2005, p. 59), so there is long-term investment and potential at stake.  Additionally, success correlates strongly with participants' willingness to collaborate again (Rodger et al., 2005, p. 56), so if collaboration is the key to the future of cultural institutions (Zorich et al., 2008, p. 10), it should be investigated in depth.

### Background

In a white paper written by an ABGD administrative board in 2008, the authors wrote, "More than six decades of formal and informal collaboration has resulted in a combined and complementary research collection of more than 15 million volumes, together forming the second largest research library in North America."  This history of cooperation set the scene for

this collaborative large-scale digitization project.  The following year, the same administrative board charged representatives from each of the four member libraries with seeking grant funding for such a project, with a principal investigator from Alpha.  This task group ultimately decided to apply for funding made available through the Library Services and Technology Act (LSTA) and distributed by their state.  This study considers the events between that charge, in November 2009, and the submittal of a grant application in February 2011.

Alpha, Beta, Gamma, and Delta are all situated within a 30-mile radius of one another. This geographic closeness enabled their early cooperation in collecting physical resources and the coordination has continued into the digital age.  Alpha and Delta are large state universities, Beta is a smaller private university, and Gamma is a historically black university.  Each has its own valuable expertise with respect to both staff and equipment.  The CLSD project's thematic content focus was chosen partly because it is well-represented in these special collections and archives.

Alpha began large-scale digitization production in 2009, after a large feasibility study. Their expertise is in the digitization of non-oversized materials and audio materials.  They have significant grant administration experience and their university library, which includes special collections and archives, has its own fiscal services and systems departments.  They will host their own content.  The principal investigator is a reference archivist in manuscripts and has significant experience with digitization grant projects and large-scale digitization.

Beta's production center has special expertise in video and still image digitization. Before and during the CLSD project their production center will ramp up its capabilities to include large-scale manuscript digitization.  They will do this independently of the funding provided by an LSTA grant.  It also has a large library systems department and will host its own

digital content. Inside the time parameters of this study, Beta experienced significant personnel changes and the representative from Beta to the task group changed three times.

Gamma has a particular expertise in the content focus of CLSD. The representative to the task group also has strong interpersonal connections with the target user groups of the CLSD collections. Gamma has a smaller library staff than the other institutions, but the university is also home to both public history and library and information science graduate programs. Because Gamma does not currently have a robust content management system that could support 100,000 digital objects, Alpha will host their content. These materials will be presented inside a separate template that clearly identifies the materials as Gamma's.

Delta is the largest of the four universities and, physically, the farthest away. Its relevant expertise lies in digitizing oversized materials and in exploring new technologies. The original representative to the task group left Delta shortly before the grant application was submitted, but the current representative was involved in most of the process. The Delta library has a systems department and they will host their own digital objects. They are currently in the midst of building a new main library on their campus.

ABGD has a central staff of four and experience administering multi-institutional grants. Their offices are within the Alpha library's physical building, but ABGD is an independent entity with its own director. It has several levels of administrative bodies comprised of representatives from each of the member libraries.

The particular LSTA grant program from which CLSD seeks funding has several requirements that have defined this project planning process. Applicant projects must focus on digitization, LSTA will not pay for processing activities, and the content must relate to state history. CLSD is applying for a three-year grant of $150,000 each year; this is the maximum

length and funding.  The project design includes digitizing non-oversized materials and still

images in year one, adding audio and video materials in year two, and adding oversized

materials in year three.  Alpha will digitize non-oversized and audio materials.  Beta will digitize

non-oversized materials, still images, and video materials.  Delta will digitize oversized materials.

Collection materials will be transported between these digital production centers.  Though it is

outside the purview of this study, Gamma will lead evaluation efforts during the course of the

grant project if the CLSD application is successful.

## PROFESSIONAL LITERATURE

To date, most collaborative digitization projects have had one definite leader. Indeed, that is the way the funding systems are set up. There has not been an attempt on this scale or with this kind of partner equality. The goal of this research is to understand how truly collaborative, multi-institutional project planning processes work through examining one innovative and ambitious attempt.

Collaboration between institutions is an increasingly hot topic for study in information and library science. In 2005-2006, the Institute for Museum and Library Science (IMLS) funded 20 collaborative projects between public broadcasters, libraries and museums (Kulpinski, 2009), and are continuing to encourage collaborative projects through grant funds. Indeed, though they do not require partners for all applicants for their National Leadership Grants (one of three categories of grants currently distributed by IMLS), they advertise that "carefully chosen partners with complementary competencies and resources can create powerful synergies that extend project impact" (Grant Opportunities, 2008, p. 12). Whether or not the project is ultimately successful in meeting its goals, successful collaboration is imperative for maintaining collaborative relationships.

What exactly is collaboration in this context? In 2008, the Beyond the Silos of the LAMs conference brought together professionals from libraries, archives, museums and other cultural institutions to discuss this definition and the future of collaboration. The consensus was that collaboration "refers to a process in which two or more groups work together toward a common goal by sharing expertise, information and resources" (Zorich et al., 2008, p. 10). Clearly, this definition does not limit collaboration to inter-institutional examples, but they are potentially the most complex.

Zorich et al. go on to describe "The Collaboration Continuum," seen below.  They

describe the process through which collaboration occurs, beginning with Contact where

organizations communicate their own missions and needs to one another.  The next step is

Cooperation, which is an informal, possibly one-sided assistance.  Moving right along,

Coordination requires a shared organizational framework for projects and a shared schedule,

possibly with specific delegated tasks.  Collaboration, where we focus our efforts, is the next

step on the continuum.  Collaboration is not just a sharing of information, but a coming together

to create something new that none of the participating organizations could effectuate on its

own.  Sometimes, when Collaboration is especially successful, that "something new" becomes

ingrained, institutionalized and with its own infrastructure, effectively merging the two

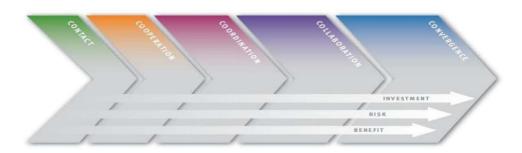organizations.  It becomes a standing "common function" (Zorich et al., 2008, pp. 10-12).



**Figure 1 "The Collaboration Continuum" from contact through convergence (Zorich et al. 2008).**

Zorich et al. represent collaboration as a natural progression from Contact, Cooperation, and

Coordination, but what makes the difference between projects that stop at Coordination and

those that move on from Collaboration to Convergence?  Murray Shepherd describes several

characteristics of successful Collaboration in libraries that may shed light on this issue for special

collections.  He says that the process must involve mutual benefits as well as "well-defined

relationships" and "common, new goals," "comprehensive planning," "mutual risk" and

distributed resource use as well as benefits (Shepherd, 2004, p. 2).  The Collaboration

Continuum points out that, as organizations move along toward convergence, the investment,

potential benefit, and the risk of failure increase at each step.  Shepherd seems to agree with

this.  He further suggests that the relationships should include clearly define roles and "mutual

authority and accountability for success" (Shepherd, 2004, p. 2), corroborating that risk

increases, but also specifying that it should increase equally for all organizations involved.

Shepherd categorizes the factors for successful collaboration into six categories: needs and

benefits; attitude; vision, mission and goals; resources (financial, human and leadership);

communication; and community development (2004, pp. 2-3).

Shepherd points out, as do Zorich et al., that the perceived needs and benefits of the

collaboration must outweigh the negatives of significant extra work and the loss of autonomy in

participating organizations.  Sharing responsibility and rewards means compromise and sharing

control of a project.  In 2008, Zorich et al. point out that "change agents" (p. 24) are often a

catalyst for collaboration; Shepherd refers to these individuals as leaders, but recognizes that

the leaders of collaborative movements must energize projects as well as administrators and

staff for efforts to succeed.  No matter in which organization a change agent is located, they

must communicate to all parties the needs and benefits that will be met through collaboration

or projects will face failure.

The second criterion is closely related to needs and benefits.  Attitude can be affected

by extraordinary change agents, incentives, perceptions of firm mooring for building projects (*ie.*

sufficient infrastructure and skills), and especially flexibility and trust (Zorich et al., 2008).  Even

inside institutions, unforeseen circumstances derail projects, but the flexibility to deal with

compromise and bumps along the road is more necessary when dealing with multiple

organizations.  Similarly, the loss of control necessary for successful collaboration demands a level of trust between those organizations.  A great deal of trust is also required for institutions to follow their change agents into such agreements in the first place.

Though vision, mission and goals do not need to be shared by institutions in general, it is imperative that all participants have the same expectations.  Shepherd suggests that collaborators set multiple, short-term goals inside larger projects in order to provide checks throughout the process as well as to build strengthening feelings of progress and success between them (2004, p. 3).  Even if these accomplishments are not formally established or discussed, they can retain stakeholder interest.

Communication is imperative for successful collaboration.  It is much of what moves projects forward on the Collaboration Continuum and must be pervasive – from top to bottom and back down again.  It is not a coincidence that progress toward Convergence requires increasing levels of communication at each step.  Effective, efficient communication goes toward building trust and flexibility as well: participants are more likely to trust one another and thus risk more if they feel they are well-informed.  Increased trust, as well as a precedent of full disclosure, enables flexibility.  It is also necessary for success to communicate well and often between partners and with the user communities.

According to Shepherd, community development is the most important characteristic of successful collaborations, not merely that it is considered but as a measure of success itself (2004, p. 7).  He suggests that focus on community development is vital to sustaining the collaboration throughout its duration and in merging the visions and goals of the institutions for the project.  Indeed, Rodger et al. agree that community development is the most important force here and also suggest that it is a major catalyst for collaboration in the first place (2005, p.

51).  In their survey of library, public broadcasting, and museum collaborations, they found that the strongest reasons for collaboration were: "to expand education opportunities, to meet community needs, to expand-diversify an audience or user base, to enhance the institution's stature [within the community], to enhance use of collections-programs, to be a good civic player in the community, and to leverage or expand resources" (Rodger et al., 2005, pp. 50-51). All of these constitute community development.  A focus on users can provide a common mission for organizations, which helps them work together successfully.  It can also help avoid conflicts during the process as it places the emphasis outside the individuals coordinating the project.

Despite the great interest in library collaboration, professional literature on what makes such projects successful is  sparse.  Studies that pertain to special collections inside those libraries, large-scale digitization, or multi-institutional grants are sparser still.  However, the field of organization theory can provide a useful context through which to examine collaboration in the library and information science field.  Coordination theory, a relatively new concept in the study of organizations, attempts to distill coordination – or what Zorich et al. would call collaboration – into universal components and processes that exist in all disciplines.  It states that, no matter how different entities are, their "common problems have to do with coordination" (Malone & Crowston, 1990, p. 358).  More specifically, in any project, the issues are still subdividing goals into actions, assigning responsibilities to individuals or groups, allocating resources for maximum utility, and sharing information effectively.  This is true of any project with more than one actor, but it is magnified in multi-institutional collaborations.

Coordination, as it pertains to coordination theory, collaboration, and this study, can be defined as "the act of working together harmoniously," including "conflict as well as

cooperation" (Malone & Crowston, 1990, p. 358).  In fact, at least partly conflicting goals are almost universal inside and between institutions. In coordination, goals must be identified, activities are then mapped to these goals, actors are assigned to the activities, and the interdependencies must be managed (p. 360).  How entities choose to perform these different components is often prescribed inside institutions, but multi-institutional collaboration requires the merging and reworking of established coordination processes.  When one activity provides the input for another (prerequisite), multiple activities use the same resources (shared resource), or multiple activities must occur at the same time (simultaneity) (p. 363), as is often the case in the planning stages of a large, complicated project, how a team manages these interdependencies is critical to project success.

Malone and Crowston acknowledge four components of coordination, each with associated coordination processes (1990, p. 360).  They see goals, which must be identified, activities, which must be mapped from goals, and actors, who must be selected and assigned activities, are all components according to them.  Interdependencies between activities are also considered components and must be "managed" (1990, p. 360).  All involved parties may not agree on the identification of the components, but Crowston (1997) contends that by focusing on processes, one can compare disparate organizations because the "problem thus becomes not what structural form an organization has, but what process it uses to accomplish a particular task" (p. 158).  Alexander would disagree, citing coordination structures and tools as the appropriate units of analysis (1993, p.340).  However, Alexander defines his coordination structures as specific to coordinated projects and they are more similar to processes than the moniker suggests.  For example, Malone and Crowston might call the formation of a task group to solve a particular problem the process, and Alexander would examine the task group as a

structure.  Both are useful concepts and the means of achieving the preconceived goals – for which the task group was formed – are still the issue.

The larger difference between Crowston (and Crowston and Malone) and Alexander is the latter's focus on interorganizational coordination, as opposed to coordination inside a single entity, and planning as a coordination activity.  He says that "Addressing issues or problems of any complexity, the development and implementation of plans, and indeed, policies, programs, or projects, usually calls for the involvement of several, and often many, parties.  A critical part of the planning undertaking, then, is concerting the decisions and actions of the participating units… In this sense, therefore, we can regard planning as an exercise in interorganizational coordination" (1993, p. 218).  Alexander admits that successful management of interdependent activities is a good barometer of planning effectiveness and that it can be observed by studying both structures and processes.

Alexander defines coordination as "a deliberate activity undertaken by an organization or an interorganizational system to concert the decisions and actions of their subunity or constituent organizations" (1993, p. 331).  Rather than focusing on managing interdependencies like Crowston and Malone, Alexander focuses more on what he terms "Interpretive" and "Contextual" facilitators of collaboration, which if absent, can become inhibitors.  Interpretive facilitators are the facts of a collaborative situation as perceived by the actor; Contextual ones are objective factors and sometimes predate planning processes.  All of the Interpretive and Contextual facilitators identified by Alexander relate in some way to Shepard's six functions of successful library collaborations.  Some of these are listed in Figure 2.  Gray used many of these facilitators as factors in what she saw as the three stages of collaboration: defining problems, establishing direction, and structuring (1985).  The problem inherent to evaluating effectiveness

through objective and perceived factors is that gaining stakeholders' perspectives is difficult.

Alexander laments that this has prevented much study of the effectiveness of

interorganizational coordination "even from a management or goal-related perspective" (1993,

p. 333).

| Interpretive | Contextual |
|---|---|
| Perceived relation of needs, benefits, and rewards to (threat, costs, or risk of loss) | Relation of actual needs, benefits, and rewards to (threats, costs, or losses) |
| Positive (or negative) attitudes | Centralization or decentralization |
| Administrative/staff consensus | Professionalism |
| Maintenance (or loss) of organizational/paradigm integrity | Standardization |
| Perceived interdependence | Informal contacts and exchange of information |
| Higher (or lower) service effectiveness | Structural similarities |
| Ability to serve new clientele | Similarities or differences in resources, needs, |
| Rewards (or costs) of environmental outreach | services, goals, operations, or tasks |
| Accessibility (barriers; e.g., socialization, leadership approaches, staff training) to other organizations | Frequent and adequate interorganizational communication |
| | Scarce resources |
| Good or poor historical relations with organizations | Organizational or environmental norms of innovation and coordination |
| Common commitment | Occupational diversity |
| Agreement on domains and value of coordination | Geographic proximity |
| | Voluntary association membership |
| | Personnel turnover |

**Figure 2 Adapted from "Facilitators and (Inhibitors) of Interorganizational Coordination (IOC)" (Alexander, 1993, p. 333).**

Alexander goes on to identify six structures for potentially successful interorganizational

coordination: interorganizational groups, coordinating units, lead organizations, single

organizations, non-administered programs, and coordinators (1993, pp. 335-339). The first of

these, interorganizational groups, are comprised of organizational representatives and often

coexist with other structures. They are not permanent structures and have no dedicated staff.

Interorganizational groups sometimes have trouble with their own transience and with

members who begin to identify with the coordination more than their home organization, but

are especially valuable when "shared understanding and accepted rules for interaction exist"

(Alexander, 1993, p. 335). Coordinating units are similar to interorganizational groups by

increased autonomy – they will often have budgets and staffs of their own and may be permanent (p. 336). Lead organization structures exist where "one organization is charged with, or assumes, the responsibility for coordinating the activities of all the relevant organizations in the interorganizational network," either because of specialized expertise or power (p. 337). If the lead organization does not supervise, but instead completes all relevant activities, the structure is what Alexander would term "single organization" (p. 337). Alexander defines non-administered programs as systems formed to meet external stimuli, for example, grant-funded projects. He says these are the simplest and rarest forms of interorganizational coordination because they rarely exist without other structures. Lastly, Alexander discusses coordinators, who are appointed to manage a program or problem. He claims coordinator effectiveness is related to individuals' "personality, qualifications, and commitment" and how they are situated in the larger structural context. Specifically, "if the coordinator enjoys authority, controls the allocation of resources important to participating organizations, or occupies a pivotal position in the information exchange network, then chances of success are much better" (1993, p. 336). This is to say that the goals established by the entity that appointed the coordinator are likely to be accomplished. It does not mean that the relevant stakeholders of the coordination will all be satisfied.

For the purposes of this study, collaboration will be defined as several organizations working together toward a shared, overall goal. Rodger, Jorgensen, and D'Elia found that successful collaborations can have a positive impact on organizations long after the projects end (Rodger et al., 2005, p. 59), so there is long-term investment and potential at stake in each collaborative project. Additionally, success correlates strongly with participants' willingness to collaborate again (Rodger et al., 2005, p. 56). The structures and processes as defined by organization theorists, coupled with known characteristics of successful collaborations in

libraries, provide a strong context in which to evaluate multi-institutional projects in the

digitization of special collections.

## METHODS

Crowston recommends a three-pronged approach to studying coordination: (1) examining process documentation, (2) observation, and (3) interviews (Crowston, 1997, p. 160).  This case study took the same approach.

Though the robust project wiki for CLSD is not publicly available, several formative project documents are: a white paper by ABGD regarding collaborative large-scale digitization, a planning grant application, an intellectual property rights strategy, a letter of intent to apply for grant funding sent to the funding body, and the formal grant application.  The grant application in particular contains telling information in a section devoted entirely to the planning process.  And the ways in which the grant worked around the funding agency's assumption of unequal partners will be a key area for analysis in the grant proposal document.  These documents provide valuable insight on their own, but also influenced the development of interview questions.

The planning group for CLSD, comprised of an ABGD program officer, the principal investigator from Alpha, and representatives from Beta, Gamma, and Delta, held many meetings over the course of the planning period.  At many of these, the planning group invited other stakeholders and experts to weigh in on important project decisions.  These meetings were observed and copious notes were taken, which primarily serve to contextualize interviews and documentation.

Interviews took place on a rolling basis as participants responded to email solicitation and appointments were made.  Potential interview subjects included university library employees who had direct involvement in the planning stages of the grant project.  Individuals listed in the grant application as the formal responsible party from their institutions were sought

first as they had decision-making authority and were directly involved in the coordination. (Higher-level administrators had more authority but less hands-on knowledge of the coordination process, so they were not sought for consultation in this study. Further exploration would likely include administrators and special collections department heads.) Scripts of the email solicitation, study information sheet, and interview questions for the participants are attached to this study as addenda.

An outline based on Malone and Crowley's components of coordination: goals, activities, actors, resources, and interdependencies (prerequisite, shared resource, and simultaneity) was used to create the interview script (1990, pp. 363-365). Shepard's factors for successful collaboration were also considered: needs and benefits; attitude; vision, mission and goals; resources; communication; and community development. Interviews began with questions about how subjects became involved in the project. Subjects came from varying levels of seniority and authority within organizations and this framed the pursuant discussion. After this, participants were asked what they viewed as their goals for the project at the outset of planning in order to provide a baseline for comparison for the rest of their interview. Subsequent questions concerned how those goals and expectations changed during the planning process. Additional questions attempted to address perceptions of fairness and equality with respect to activities and resources. The conversations then turned toward the subject's perceptions of communication during the planning process, both within the planning group and between the planning group and the community (scholars in this case), as effective communication is imperative to successful collaborations. The script for the interviews was intentionally vague and open-ended as anecdotal evidence of coordination was especially prized in this study as subjects' perceptions of the project were viewed as equally valuable to more objective data.

Data collection from each participant ceased once his or her interview ended.  The program officer from ABGD, the principal investigator (from Alpha), and the responsible party from Delta participated in interviews and each lasted between 25 and 50 minutes.

### Known Limitations

The largest limitation in this study is that the researcher is employed by the consortium as a project coordinator working on this planning grant.  The possibility for subjectivity is thus high, but the focus on perceptions as much as facts mitigates the negative consequences of this risk to a great degree.  Additionally, the close relationship of the researcher to the project participants is the point of access that enabled this study.

Further limitations concern the availability and willingness of project participants.  The consortial relationships are ongoing and, assuming the success of the grant application, the planning group will become the project's steering committee.  For this reason, the study chose to focus on the elements of coordination that were successful and not to ask interview subjects to relate perceived failings unless they so desired.  The continued work also requires that pseudonyms be used.  Additionally, the planning process saw an unusual amount of personnel turnover.  Over its course, the responsible parties at both Beta and Delta special collections changed.  In Beta's case, a new department head came in during the middle of the planning process and the staff member responsible for digital projects left Beta.  When the grant was submitted in February, the official responsible party was a stand-in for the latter.  He was not interviewed for this study.  In Delta's case, a heavily involved department head left the institution during the project planning period.  One of Delta's staff members with a special interest in digital projects, and who had been involved to some degree throughout the project, became the responsible party for his institution.  He did participate in an interview.  Gamma's

responsible party did not change throughout the process, but he was unavailable for interview

due to other commitments.

**FINDINGS**

This study was conducted in two phases: an exploration of documentation and interviews. Throughout both phases, observation informed data collection and interpretation. The findings are thus broken down into two sections with observations supplementing both.

### *Documentation*

Documentation was studied chronologically – from the first pieces produced to the most recent – in an attempt to uncover changes over time. The first document was an internal white paper produced by an administrative body of ABGD with representatives from each library called the Collections Council. The document, entitled "Large-Scale Digitization: An ABGD Agenda," is dated May 29, 2008, and serves as a statement of consortial goals. It also provides insight into the assumptions that CLSD arose from. The first is that "The digital age offers the ability to extend ABGD-related cooperative collections efforts" and that many of the necessary investments "could be more profitably shared across participating libraries" (p. 1). The document makes it clear that this governing body sees collaborative digitization projects as a natural extension of the consortium's history of coordination.

The white paper goes on to elaborate many goals, advantages, and potential barriers to successful collaboration. Those goals that specifically relate to the CLSD project include expanding the availability of resources, agreeing on common standards, and developing best practices jointly. Relevant advantages include advancing digital preservation, capitalizing on complementary collections, and building large-scale digitization infrastructure. The Collections Council identified barriers like varying resources to commit, consensus-building, "varying opinion on types of partners to engage and approaches for engaging them," and poor project management (2008, p. 4). They specifically point out that seeking outside funding may ameliorate some of these potential barriers to collaboration.

Potential project areas and existing large-scale digitization projects are also explored in this document. Sharing resource costs, developing shared awareness, focusing project efforts along specific content themes, exploring forms other than books, and dealing with rights issues related to digitization are all mentioned and all pertain to CLSD in some manner. The document makes clear that the governing body wished for ABGD to explore large-scale digitization projects that move in new directions, away from industry funding and into complicated risk management issues associated with copyrighted and orphan works.

The next document, written in November 2009, is the formal charge from this governing body to the task group that would become the CLSD planning group. It outlines the group's goal: to retain grant funding for an "open-access collection of digitized manuscript materials" with sustainability potential. The charge mentions applying for funding from the Institute of Museum and Library Services (IMLS), however the group eventually applied for a Library Services and Technology Act grant administered through the state instead (LSTA), implying that the goals were actually not tied to a specific funding agency. The charge further identified the group members: a reference archivist from Alpha as the principal investigator and special collections or university archives department heads from the other three university libraries. In this document, Alpha officially became the lead applicant for the project.

In February 2010, the planning group applied to LSTA for funding to plan a collaborative large-scale digitization project. This document, the Planning Grant Application, provides a snapshot of the planning process at that time and the group's thinking about the direction in which the project would move. It establishes a content focus on the home state; observations revealed that this decision was made because the collections lent themselves toward that geographic focus but also that LSTA's funding interests were scoped specifically to state history.

Similarly, the emphasis on digitization rather than on processing came about because the LSTA grant program would not fund any processing activities.

The Planning Grant Application explains that ABGD had previously conducted an environmental scan of collections and digitization resources and it gives background for the partner libraries.  In explaining why Alpha became the lead institution, the task group cites a previous Alpha-administered grant to explore the feasibility of large-scale digitization and the subsequent large-scale digitization begun in the fall of 2009.  According to the application, Alpha's digitization of 30 manuscript collections between then and February 2010 provided a proof of concept for the large-scale digitization.  The document goes on to describe Beta's experience with digital humanities collaborative projects and their scholarly communications strengths, Gamma's collaborative digitization project experience with other HBCUs, and Delta's expertise in project management and their ongoing experiments with large-scale digitization.

In the Letter of Intent, drafted by the task group again and submitted November 2, 2010, the project rationale and design are explained in more detail.  The document, which served as a preliminary application to LSTA, delineates planning activities as well as future plans. Biweekly meetings, consultation with staff, researchers, and potential users at the 95th annual Association for the Study of African-American Life and History conference are all included. Additionally, the document lays out the project plan for a three-year process: to digitize non-oversized manuscript materials and images in the first year, add audio and video materials in the second, and to add oversized in the third.  The document leaves out specifics of digital production center locations because, as observed by this researcher, Beta was as yet unsure if they would develop further digitization capabilities to complement this project.

The Intellectual Property Rights Strategy was written by the CLSD principal investigator and the ABGD program officer involved in the project, based on work by Beta's scholarly communications officer. It pertains to this project specifically, but was adopted by the ABGD administrative bodies and will inform future digitization of twentieth century manuscript materials as well. Of note in this document is that it does not make more explicit that institutions will be completely responsible for the materials they present online. The document is based on a fair use argument and the unlikelihood of litigation over the materials, but it straddles an interesting line between a shared assumption of risk and individual responsibilities. This would be more complicated if the created digital objects, for the most part, were not returning to the manuscript materials' home institutions for presentation.

The last and most recent document examined for this study was the formal grant application from the CLSD project to LSTA. It is telling that the application is structured very much for a strong lead institution and not well for an equal-partnered consortial project. The long application requires much more information from the lead institution – Alpha in this case – than it does from the partner institutions, including more information about staff and production and maintenance capabilities. The assumption of the application instructions is that the lead institution will contribute the vast majority of resources, which is not true for CLSD. It is clear from the project's grant application that the planning group dealt with this by including in-depth information about partner institutions where less would have sufficed in other situations.

The grant application is 197 pages in total with addenda, but the three pages responding to a question about the project planning process are most relevant to this study. They include a timeline and also a discussion of alternatives considered in the process. The application states

that "At the heart of the planning process was widespread consultation," and discusses focus groups as well as regular consultation with ABGD governing bodies including progress reports (p. 15). Interestingly, it states reasons for applying for LSTA funds that do not directly correlate to those observed during the study. The grant claims previous experience with LSTA projects, LSTA's commitment to open access and support of digitization, LSTA's support for complex, inter-institutional projects, and the state-focused scope as reasons for selecting that particular funding agency. Observations suggest that while the first two reasons are accurate, the LSTA grant application process is not completely in line with this complex or collaborative a project and that the state-focused scope was a function of the funding agency's requirements and not the other way around.

This section of the grant application elaborates on several decision points in the planning process. The first is the decision to incorporate created content into the existing platform rather than to create a silo platform or resource. The grant credits the Collections Council with making this decision that narrowed the project's scope. The second decision was to share responsibility for non-oversized manuscript production between Alpha and Beta. The grant is not overly precise in explaining why this was the decision, but observation revealed that while Alpha had existing large-scale capacity, one of Beta's institutional priorities was to ramp up its own production capabilities. Similarly, the grant somewhat attributes the decision for Alpha to host Gamma's content to reusing existing resources (in Alpha's content management system). This seems true based on observations, but it is also true that Gamma had no immediate interest or resources with which to build a home for the created digital objects.

One of the largest decisions enumerated in the grant application is that to use grant funds almost exclusively for project staff. In making that decision, the planning group defined

goals and activities (project management, materials preparation, digital production, metadata management, file transfer, and file upload). They then identified the actors for these activities in the form of potential project staff. They determined that the project would require a project librarian to manage grant activities for the consortium, a digital production manager to oversee materials transportation and production at Alpha (where most will occur), and myriad temporary project staff located at different locations. In observing meetings, it was clear that the libraries assessed their responsibilities in their grant and their current resources and, as a function of that assessment, determined how much project staff they would need in each of the three years of the grant project. The budget was worked and reworked to accommodate these needs as best and equitably as possible.

## Interviews

Though interviews were only possible with three project participants, those three subjects represent the principal investigator, the consortium, and a partner library. The base interview script was constant, but each interview naturally produced a different series of questioning that in itself is telling.

### Interview One: The Principal Investigator

The first interview conducted for this study, on March 22, 2011, was with the principal investigator (the PI) of CLSD, a reference archivist at Alpha. She will be referred to as the PI. She related that, in November 2009, her then supervisor asked her to "lead the task force that would explore grant possibilities" for large-scale digitization projects in ABGD. When asked about how Alpha became the lead institution for CLSD, the PI said that it came down to resources and experience largely. Alpha had experience with large-scale digitization, and she had led that effort to a great degree, and many of the other libraries' resources were already spread out with other projects. Her initial responsibilities were largely wrapped around

gathering people together, leading discussions and brain-storming sessions, and figuring out exactly what the task at hand was.  Additionally, as the PI and the representative from the lead institution, she became responsible for "bureaucratic hurdles" like obtaining fiscal services' and university approval.  She mentioned that the group sought a project that would be "challenging yet accomplishable."

The PI, and the other two participants interviewed, identified the choice of funding agency as the largest and most project-shaping decision point in the project planning process. The group considered IMLS, Andrew W. Mellon Foundation, and LSTA funding, but preferred IMLS at first.  The PI related that "We actually had a phone conference with a program officer at IMLS, but we were a little late getting to her. The IMLS grant would have been due in February and we had just started meeting in December. They are very interested in their national leadership grants, which did not seem like something we could pull off. We weren't at the stage where we were ready to jump into national leadership although there was some interest from the committee."  A purely large-scale digitization grant was more in line with ABGD's Collection Council's mandate.  They were less interested in tool- and platform-building and LSTA seemed like a natural fit once the administrative preference was understood.  The PI remarked that the task group was very optimistic and "basically proceeded as though we were going to get the planning grant and the digitization grant – we started planning right away."

The decision to apply to LSTA meant that the content must be scoped to state history. But, as the PI pointed out, "all four of our institutions have strong holdings in [state] history, so then it was a matter of determining what part of [that] history we were going to pursue."  She noted that "building tools is of interest to some of our consortium members in particular," but that she feared tool building might be "out of her league."  She saw the project, scoped to LSTA,

as something the consortium could accomplish and learn a lot from, but also something that she felt comfortable leading.

Much of the interview with the PI revolved around the issue of representing an institution and participating in a consortium. She pointed out that, historically, there has been much competition between special collections for particular materials but that on a collaborative level what matters is "that a great institution got a great collection." She feels that this was already a trend in the profession, but that working on this project helped her to more fully embrace the concept. Initially, the PI said that she had very straightforward goals of getting funding and doing a good job. But over the course of the planning period, she developed a deeper appreciation for the consortium and realized she needed "to set aside institutional goals, not in their entirety, but basically to adjust them so they weren't overwhelming the consortial goals." She said that there is an attainable balance between institutional and consortial goals where a decision "might not be exactly what you would have chosen, but it's still good and it still helps your individual institution."

The PI had many interesting observations about the role of ABGD in the project planning process. Though the charge for this task group came from the Collections Council, she said there are "layers." The Collections Council answers to the Director's Council and they in turn answer to the Board of Governors, so "the cooperation is clearly going on at the top." She said that this, and the long standing cooperation, really influenced attitudes and participation and that it helped her to personally "buy in" to the consortium as she had not done before this project. The PI said that without this consortial layer, the experience might have felt "like a group project in library school, where you have a goal and you've got to reach it because passing the class is on the line but your heart and soul aren't really into it." She admitted that there

were a few challenging moments in trying to mesh out individual institutions' priorities and the interests of the planning group's members, and she might be more patient if in the same position again, but that she felt a general sense that everyone was working for the best interests of the consortium. She thought that the task group did a good job keeping stakeholders informed and might only increase the emphasis on the consortium component next time.

With respect to the high amount of turnover in the project planning group, the PI said "the chemistry of the group shifted with each phase" and "the lack of consistency meant a lot of rehashing of things and getting people up to speed" but that the quality and energy of the individuals more than made up for the inconvenience. She also pointed out that getting so many more perspectives served as a sort of check on the process because it was easy to get drawn into details. She said "that kind of questioning is critical for this massive an undertaking."

When asked about her expectations for future collaborative projects, her first response was that her "hope is that there might be projects for special collections that don't necessarily hinge on digitization that bring us together to work together for a common goal that hopefully will very well serve our common users." She thinks this is very possible because the project participants made good connections with each other, developed trust and comfort, and can see the benefits of collaborating. She acknowledged that coordination requires a lot of energy and time, but anticipates bigger and different creative collaborations.

The PI's primary regrets were that she did not form closer connections at the beginning of the project and perhaps made too many assumptions about people's understandings. She said she wishes she had gone and met one on one to talk through the project goals and objectives with planning group members at the outset. She thinks visiting, instead of relying on email, would have helped form interpersonal connections, which is especially important in a

multi-institutional project where institutions do not have the same resources, expertise, or volume and might feel isolated. She also regrets that she did not get more feedback for the grant application, which she attributed at least partly to the high level of trust in the planning group.

***Interview Two: The Program Officer***

The second interview conducted for this study, on March 23, 2011, was with the ABGD program officer (the PO) assigned to support this task or planning group. The PO's official roles were to provide support to the group and to serve as a liaison between the task group and the governing body within ABGD that charged it. She said that all projects are different, but that "in this particular case we had a very hands-on, energetic, leadership-oriented chair who really was the leader of the group and I think she and I became partners in this planning process." She also said she got more involved than she might have because the content focus coincides with her academic background – both the area of history and archival materials.

With respect to the choice of funding agency, the PO said that the "choices were compelling enough that we brought it [the issue] to the Collections Council and we said 'okay, here we are, we have a group that has a lot of energy to design a digitization project but in so doing we realized what pioneers we are. We realized this is the first consortium to undertake such a large scale project collaboratively. Shouldn't we also simultaneously pursue funding from a different sort of organization like an NEH (National Endowment for the Humanities) or IMLS to do model documentation and really focus on the leadership in tandem with the actual digitization." The Collections Council said that was a wonderful idea, but too much to focus on at the moment, which the PO said she is positive was the correct decision. However, she still thinks it is possible that model documentation or tool development might be added on to this project's scope at some point in the next three years or after.

She said that she is very proud of the way this project unfolded and of its emphasis on consultation. Though bureaucratically the activities should perhaps have been divided among several groups, she says everyone knew "what they were doing and what their roles were and people were in constant contact with their supervisors." She said, about consultation, that it helped with stakeholder buy in and was exceptionally successful based on her previous experiences. She was delighted – "but not surprised" – that the project received a lot of stakeholder support. She said that "ABGD is kind of a top down organization in that we have a central staff that facilitates projects that are mandated from the director level, but they always play out through the talents and contributions of the library staff." Project planning success is difficult to gauge at this point according to the PO, but consultation, guidance by the ABGD white paper of 2008, and use of the wiki for communication were very effective.

As for the rights strategy, the PO said "that it was not a hard sell" and that "we wrote a document to reflect where we were." She called the document a "shared statement of philosophy" that allows individual institutions to make their own decisions.

With respect to future collaborations outside ABGD, the PO thinks those are more complicated than they might seem. ABGD members have memoranda of understanding governing their collaborations and she feels that future external collaborations are most likely to be with other established consortia. She specifically pointed out that she expects there would be some kind of established structure to support such projects.

The PO did not recall why Alpha became the lead applicant, but she said the decision was made at the top and ruffled no feathers. ABGD's offices are located on Alpha's campus, but the PO does not feel that this really impacted the planning process – which was heavily driven by the PI and the PO – except to make access easier. She said the process may have been

different if the PI had been located at a different campus, but not the outcome. However, she believes that the individual who served as principal investigator greatly impacted the project. She said the "level of involvement and leadership exercised by the PI in this case was so high, that that drove the collaboration." Sometimes, PIs in AHBD projects rely more heavily on their POs, to organize meetings and set agendas, but in this case "there were two powerful factors that determined the process we used: one was the geography and the other was the PI herself."

The PO added that part of what makes projects like this successful is that the institutions "generously contribute excellent staff" to work on them. Despite the turnover in this project, she said, it benefited from very dedicated library staff.

### Interview Three: The Delta Representative

The third interview conducted for this study, on March 25, 2011, was with the representative from Delta (RD). He was not an original member of the task group, but joined the project very early as Delta's "representation was at the department head level which is at a remove from day-to-day production planning." He felt that his role was largely support at first, but he became the official representative when the department head left Delta shortly before the grant was submitted.

As a representative, RD stated that his goals were to make sure that the project was "mutually beneficial" for the consortium and Delta. He wanted "to be able to contribute to the design of the project as well as making sure we could contribute and benefit as well." He said he feels like he has seen large-scale digitization "grow up" over the last six or seven years and that some of his personal goals for the project have evolved as a result of that. Delta, and RD personally, is particularly interested and excellent at discovery and technology; RD stated that he wants to bring that expertise to this kind of library resource. He sees potential for that in

collaborative projects such as this – to "build better tools essentially for search and delivery and maybe eventually for interpretation." RD related that he initially expected CLSD to have a "real focus on access and discovery," which is the part of the project that most interests him, but that expectation went unfulfilled. When asked if he regretted that this angle is not quite represented, RD responded "not really, we have to figure it out anyway – we don't really have the right tool for delivering this kind of stuff where context is so important." He expects those aspects to be worked out in the future in one of two ways: "either we'll pursue another grant and really focus on what to do with this stuff now that it's digitized and online, or we'll just take it on ourselves as an in-house project."

Throughout the interview, RD remained confident in the benefits of collaboration. He noted that it allows each member institution to bring their "certain strengths to the table" and that there is a lot of collaboration, both behind the scenes and officially. He mentioned that staff in the consortium talk and develop relationships that last after task groups like these.

RD commented that, though the decision was made before his tenure, the project would have been more complicated if the group had sought IMLS funding instead of LSTA funding. He elaborated that: "One thing that's a real benefit is that we're drawing on Alpha's experience, and a lot of the project is really focusing on things that Alpha has done. There are these new angles, but they're not entirely new – we have experience collaborating with other universities and we're transporting [oversized materials] already. And Alpha has experience working with all kinds of other institutions. So maybe the pieces add up to be something new, but in a way it's experience that we have." He went on to add that he expects success.

RD also had some interesting things to say about large-scale digitization and special collections in a larger context as well. He pointed out that one of the primary differences

between previous projects and this is that Delta has always known the contents of folders in previous projects. The workflows of large-scale digitization preclude that level of attention (e.g., removing staples), but the preparation of materials may determine the process by which they are digitized. The first safeguard against this is obviously processing, but it is not 100% reliable. As this project will digitize a number of university records, student privacy concerns may become an issue and will not be covered under the rights strategy. As for special collections in general, RD remarked that he doesn't think digitization has always been seen as a natural part of them, but he thinks large-scale digitization is a natural extension of traditional access (which consists of arrangement and description). He said that "insofar as we can assume that Delta wants to provide access to special collections material, [large-scale digitization] is totally appropriate."

RD also found the levels of communication in the project appropriate. He had "never been a wiki guy," but he claims he became a fan through this project. And although at times he almost felt like he worked for ABGD and not Delta, he did not think any of the meetings were meaningless or less than productive. (It should be noted that RD served on several ABGD groups during this period and the above comment relates to that situation, not CLSD in particular.)

One thing RD suggested was that group members could serve as support for one another in even more contexts. He referenced that as the projects gets flushed out more, small details need to be worked out. RD used the example of selecting collections for the project: as plans become more concrete, Delta has gone back to collections and re-weighed the pros and cons of digitizing their selections. They have found new issues – things previously irrelevant perhaps – that caused them to reprioritize their proposed digitization order. RD said that it

might be helpful to have some way to communicate that to the other institutions in case they

had not considered these issues yet either.

## ANALYSIS and DISCUSSION

Interorganizational coordination is a complicated issue that can be viewed from several angles. This analysis takes three separate, but closely related, vantage points. The first looks at the CLSD planning through Malone and Crowston's framework of coordination processes. It takes into account the processes underlying coordination and examines some examples of managed interdependencies. Alexander provides the second framework, specific to interorganizational projects, to evaluate the structures and tools involved in those processes. Lastly, Shepard's six characteristics of successful library collaborations are discussed in a CLSD context.

### *Coordination Processes*

According to Malone and Crowston, there exists a hierarchy of processes to support coordination. At the bottom is a shared perception. In the case of CLSD, this manifests itself largely in the shared search function designed by ABGD. Because of this tool, the partners are able to host their own digital content and still make it accessible together. Beyond this component, the partners also seem to share a belief that the consortium really can build more cooperatively than they could together – and this seems to pervasive at all levels of the organizations. Above this is communication, including establishing a common language. In some ways, the CLSD project planning group did this very well: all interviewees mentioned the benefits of using a project wiki for much communication. The PI added that she felt representatives kept their administrations informed and that consultation with stakeholders and potential user groups was very successful. Additionally, the PO and PI communicated with great frequency both in person and online. One potential failing in communication was mentioned by the PI, however. She expressed a desire for even better interpersonal connections with the other representatives on the task group. It is possible that this would have improved the

project, but it is perhaps more interesting that the PI lamented this; it demonstrates a very solid commitment to communication.

The next level above communication is group decision-making.  This project planning group faced several decision points, but all of the interviews stressed the decision to go for LSTA funding as the largest and most project-defining.  The initial charge for the project specifically directed the group to seek IMLS funding, which they attempted.  But they determined that other funding options, like LSTA, might be more in line with the goals mandated by the ABGD Collections Council.  The group proposed and evaluated alternatives, but lacked the authority or consensus to make this change.  Ultimately, they had to appeal to the authoritative body to make that final decision and it defined the project.  Nonetheless, as the PI stated, the Collections Council chose the option that felt like a natural fit to the task group.  Whether or not the group had the authority to change directions in this way, they had selected LSTA as the best option.

The top level of this hierarchy is coordination.  Malone and Crowston define this broadly as managing interdependencies and, more specifically, as identifying goals, ordering activities, assigning activities to actors, allocating resources, and synchronizing activities.  CLSD managed all three identified types of interdependencies in the planning process.  The grant writing process involved many prerequisite activities; institutions needed to provide the raw data for the application.  This was managed through deadlines, but as the PI mentioned, these were not always kept to perfectly.  Closer interpersonal connections may have impacted this, but ultimately all hard deadlines were kept because the project made smaller, internal deadlines for information gathering.  LSTA grant funds represent an enormous shared resource and interviewees seemed to view their proposed distribution as appropriate though each institution

will receive different amounts of resources. Most of the digitization will occur at Alpha and Beta and they will receive most of the grant funded resources (project staff). As noted in the findings, this was decided based on self assessments of project staff needs. The white paper listed as goals expanding the availability of resources, agreeing on common standards, and developing best practices jointly. At the conclusion of this project as it is currently planned, all three of these goals will be met and will become shared resources as well. One simultaneous interdependency was mentioned by RD in his interview: institutions must simultaneously design the project and prepare their collections because, if the grant is successful, production must start almost immediately upon receipt of funds. As libraries refined their selected collections, issues arose that could impact the other institutions. This interdependence does not seem to have been managed at all. It was not crippling by any means, but perhaps if it had been identified earlier or more formally, addressing it would have boosted the project planning.

### *Structures and Tools*

Alexander codified a conceptual framework for interorganizational coordination in his research that ranged from the concrete (coordination tools) to the abstract (interorganizational networks), with coordination structures in between. Tools and networks both existed in the CLSD planning process. Planning group members used informal coordination tools, like telephone conferences, email, meetings, and the wiki, as well as formal ones, like the ABGD administrative board, the formally charged task group, and review processes for applications. They did all of this inside a formal alliance network (ABGD) that each interviewee credited with providing an environment conducive to collaboration – indeed where deep cooperation is the expected norm, not an outlier.

With respect to coordination structures, Alexander identifies six separate ones. Based on this case study, it would seem that the structures are not separate at all: CLSD involved

aspects of all six. In as much as the project was designed to seek grant funding and many of the parameters were determined by the specific source selected, CLSD is very much a non-administered program as defined by Alexander. It is an interorganizational group because of shared responsibility and impermanence and also because it has no permanent staff. However, the project bleeds into a coordinating unit because the planning grant monies created a budget and the ABGD program officer represents a permanent organizing structure. There is a lead organization as a function of the principal investigator's home institution and the design of the LSTA grant application, but Alpha is not as autonomous as Alexander might expect of a lead organization. The emphasis on lead organizations with ultimate responsibility in the grant application suggests that most projects like this – collaborative digitization projects – very much have a lead organization. Bridging all of these different structures may have made the planning process of CLSD more complicated, but it also seems to have lent a degree of flexibility to the project. When choosing a funding agency, the group autonomously sought out options and made recommendations (like a cooperating unit), but needed administrative authority to formally make a selection (like an interorganizational group). Also, perhaps because of the long-standing consortium, the group seems to have avoided alienating institutional stakeholders by becoming too involved in the collaboration. The PI discussed the difficulty of maintaining both her institutional and her consortial "hats," and RD joked about feeling as though he "worked for ABGD" at one point, but they all felt they enjoyed a high level of stakeholder support and were able to balance the complementary demands placed on them.

In tandem with these four structures, the project had a coordinator (the PI) who served as a driving force. She had personality, qualifications, and commitment. The PO attributed much of the success of the project to the PI's dedication and "brilliance;" she has experience with large-scale digitization and grant projects as well as significant background in the historical

content.  She was also charged with a specific task.  However, the PI benefitted from a consortial PO who took a special interest in this project and kept an eye on the interorganizational picture.  The PO also has significant experience organizing collaborative projects.  Supportive, engaged, and intelligent task group members never hurt.

In his study of interorganizational coordination theory and practice, Alexander references a long list of facilitators and inhibitors that are outlined above in Figure 2 (in Professional Literature).  Many of these are relevant to CLSD.

Perceived needs, benefits, and rewards drove the project to a great degree.  The need was identified by the administration both in the white paper and in the formal charge to the task group.  The Collections Council identified anticipated benefits of CLSD, including expanding the availability of resources, agreeing on common standards, and developing best practices, but the interviewees saw more potential benefits.  The PI mentioned that, although developing model documentation for other similar projects is currently outside the scope of CLSD, she thinks that it could be incorporated into later years of this grant.  RD thought perhaps tool building could be added on to the project as a separate but related component.  Interviewees unanimously viewed this project as both a natural extension of previous special collections work and as a beginning to further collaboration.  Indeed, the future collaboration seemed a direct benefit of this project.  There is also the obvious benefit of responding to user requests for entire collections and record groups to be presented online.

Perceptions of risk varied in the findings.  According to the PI, the Intellectual Property Rights Strategy lays out the individual philosophies of the member libraries, but is not a shared assumption of risk.  She seemed confident that it will support large-scale digitization.  However, RD brought up an interesting point that large-scale digitization brings risks besides presenting

copyrighted material online. Not knowing the contents of each folder presents a new risk with respect to personal privacy. Despite this, none of the interviewees were overly concerned with the perceived risks and they certainly did not overshadow the expected benefits.

CLSD benefited from very positive attitudes throughout, which undoubtedly contributed to trust levels and flexibility. Even RD, who admitted to hoping for more access and discoverability angles, was not discouraged. Administrative and staff consensus probably contributed to this, but despite mandated commitment, interviewees expressed that participants were generally very dedicated individuals. The charge was very clear and, as interviewees noted, stakeholder involvement at every step made task group members feel they were going in the right direction and had their institutions' support. Additionally, the planning grant noted that an environmental scan of the collections and technical strengths had already been completed before the planning process. This, coupled with an existing paradigm of organizational cooperation and support, gave participants reason to expect smooth planning and success. The strong historical relationship between the libraries could only have bolstered this expectation, but it also could have provided a soft cushion. It is unlikely that the failure of this project would have a significant negative impact on consortial relations, so task group members may have felt they needed to be less cautious in their planning. For example, if the project digitizes 300,000 items instead of 400,000 that will inform future collaborations rather than prevent them.

All interviewees, and indeed all documentation, identified a primary purpose of the project as increasing service effectiveness. A central tenet was also that sharing resources through transporting materials between specialized digitization centers was the best means of producing and presenting large volumes of digital objects online. There is a high degree of

perceived interdependence inherent in these assumptions.  However, two things undermine

this.  The first is that Beta will develop its own large-scale manuscripts digitization capacity.  This

suggests either that Beta does not wish to be dependent on Alpha for this or that they feel the

volume might be too large to rely on Alpha alone.  Or this could just be a convenient

opportunity for Beta, which is the only university with private funding, to ramp up its production

as it had always planned.  Either way, the interdependence as it was conceived in the initial

project plan is eliminated.  Additionally, RD mentioned in his interview that he suspected Beta

and Alpha might each have the capacity to digitize oversized materials.  Whether or not this is

accurate, it does suggest less dependence than the grant application contends.  Pervasive,

however, was the concept that the collections are interdependent and that, by collocating them

online, the context of each is enhanced.

Independent of perceived facilitators and inhibitors are what Alexander refers to as

"contextual" ones.  These include many of the same factors as seen by an objective outsider.

Many of these are obviously seen in the case of CLSD.  The existence and involvement of ABGD

central staff clearly illustrates that innovation and coordination are the norm inside the

consortium.  Membership in the consortium is completely voluntary, as is participation in the

CLSD project, suggesting a high level of devotion to coordination.  Geographic proximity

facilitated the project planning, as did the diverse human and technical strengths that formed

the base.  There was frequent informal communication, facilitated by the wiki and meetings and

task group members' communicating with their supervisors, as well as more formal

communication like progress reports and stakeholder focus groups.  The project even

communicated to potential users by hosting an interactive session at a conference devoted to

the project content focus.

One area where the actual factor might differ from the perceived is in the rights strategy. The issue RD brought up about unknown folder contents is not addressed in the formal strategy and was not discussed in meetings prior to grant application submittal to the researcher's knowledge. This is an unknown quantity that may need to be worked out once digitization actually begins.

Coordination was certainly assisted by institutional similarities and scarce resources. The participants share a common structure in ABGD and an administrative group identified their needs and goals for them. As special collections and archives, their services are much the same: to provide access to unique materials. Resource scarcity was both a catalyst and organizing factor for the project. Large-scale digitization requires more project staff, which grant funds can pay for. Also, the limited availability of specialized equipment and expertise prompted the planners to design a project that takes advantage of separate production centers rather than being limited by them. The hope is that the project will create a workflow that can be sustainable in some way, standardizing collaborative large-scale digitization and serving as a pilot for the profession.

Personnel turnover impacted the planning process to a great degree. According to the interviewees, the high level of turnover was perceived as more a boon than a hindrance. However, from a more objective perspective the turnover undoubtedly created difficulties inside the institutions where new task group members had to balance old duties in addition to CLSD participation.

### *Six Characteristics of Successful Library Collaborations*
CLSD had all six characteristics identified by Shepard to varying degrees. The participants shared needs and benefits and had positive attitudes. Their institutional missions

and goals coincided and were further unified by the existence of ABGD.  Making effective use of resources brought them together and communication kept them on the same page.  Perhaps most importantly, the task group involved all of their communities: users, staff stakeholders, administrators, and university faculty.  Further, the project included well-defined roles as well as shared authority and responsibility.

Well before CLSD began, the Collections Council identified collaborative large-scale digitization as a goal because they felt that the need and benefit well outweighed the risks.  The task group they charged included representatives from each institution and the four shared responsibility and control, although the PI was a strong force.  Indeed, both the Collections Council and the PI served as catalysts for progress and direction throughout the project.

This support and energy contributed to the positive attitude of the project team, as did sufficient infrastructure and support provided by ABGD.  The information gathering process, in which small assignments were given to institutions, provided milestones for progress and the project team was constantly reevaluating its timelines.

Communication is one area where this project seems to have really excelled.  Despite the PI's assertion that communication could have been even better within the project group, all interviewees felt that there were never any "surprises."  Communication existed along formal and informal lines from the top to the bottom of the institutions and the consortium. Additionally, the community development efforts opened lines of communication between user groups, stakeholders, administrators, history faculty, etc. and this was crucial in maintaining institutional support, but the project planning group also took the feedback gained through these efforts into consideration during planning.  Indeed, one of the PI's only regrets was that

they did not get *more* feedback.  This consistent emphasis on the importance of communication

defined the project to a great degree.

## IMPLICATIONS

What can we learn from studying CLSD's project planning process?

First, even with long histories of collaboration, dedicated staff, and institutional support, collaboration is difficult.  Success is probably more likely when projects are scoped to be challenging, but not impossible, and when they build on the successful experiences of the collaborative partners.  Communication with all parties involved is imperative.

Shared perceptions, communication, and effective group decision-making are indeed prerequisites for successful collaboration or coordination.  However, a high level of flexibility is as important as defined goals.  Coordination structures are useful means of analyzing collaborations, but the structures are unlikely to exist in a silo and success likely relies on finding the right balance of structures than on selecting the right one to orchestrate a planning project.  And perceptions of the missions, resources, and communication might be as important as objective facts.

Perhaps the most striking implication is the importance of preexisting relationships in collaborations. For CLSD, the consortial relationship both created and drove the collaboration. The planning group did not really have to define its own goals, only to design a process for achieving them.  The long-standing relationship between the four partner libraries provided the planning group members with extensive knowledge of the other institutions before the project and also gave some flexibility in determining resource allocation and responsibilities.  (For example, if Delta does not contribute as much labor to this project, they can to the next.)  This study revealed a notable degree of dedication to the greater good of this consortium without sacrificing institutional allegiance.  When the PO suggested that future similar collaborations might be done with other consortiums, she illuminated the importance of the consortial

structure as well.  It was clear that she saw the existing relationships and infrastructure as critical prerequisites for the project's success.

Future research should include further studies of consortial collaborative projects as well as explorations of non-consortial projects.  It seems likely that different factors play into the planning of projects without a consortium to frame them and comparing the two would be very interesting.  As more large-scale digitization projects emerge in the public sector and academic special collections and archives, empirical studies of production and presentation could shed light on the relative success of collaborative and non-collaborative projects.

In conclusion, the perceived success of the CLSD planning project is attributable to the structures, the participants, and the processes.  Whether the project planning was successful in the context of large-scale digitization may not be known until materials begin to appear online. Regardless, all interviewees expressed a desire to and expectation of future collaborations with the other institutions and with large-scale digitization.  That must denote some level of successful collaborative planning.

# REFERENCES

Alexander, E.R. (1993). Interorganizational coordination: theory and practice. Journal of Planning Literature 7, 328.

Crowston, K. (1997). A coordination theory approach to organizational process design.*Organization Science, 8*(2), 157-175.

Gray, B. (1985). Conditions facilitating interorganizational collaboration. *Human Relations* 38, 10: 911-36.

Kulpinski, D. (2009). *Partnership for a Nation of Learners: Joining Forces, Creating Value.* (IMLS-2009-RES-03). Institute of Museum and Library Services. Washington, DC.

Malone, T.W., & Crowston, K. (1990). What is coordination theory and how can it help design cooperative work systems? *CSCW 90 Proceedings,* 357-370.

OCLC Research (2010, May 28). "Well-intentioned practice for putting digitized collections of unpublished materials online." Retrieved December 26, 2010, from http://www.oclc.org/research/activities/rights/practice.pdf

Rodger, E., Jorgensen, C., & D'Elia, G., (2005). Partnerships and collaboration among public libraries, public broadcast media, and museums: Current context and future potential. *Libray Quarterly, 75*(1), 42-66.

Shepherd, M. (2004). Library collaboration: What makes it work? Paper submitted to IUATL Conference.

Zorich, D., Waibel, G., & Erway, R. (2008). Beyond the silos of the LAMs: Collaboration among libraries, archives and museums. Report produced by OCLC Research. Published online at: http://www.oclc.org/research/publications/library/2008/2008-05.pdf.

## APPENDIX A – Email Solicitation

**IRB Study #**11-0467 **Mass Email Solicitation version date:** 3/17/2011

**Title of Study:** A Case Study of The Planning of a Large-Scale Collaborative Digitization Project Between Special Collections Libraries and Archives in an Established Consortium

**Principal Investigator:** Kathryn E. Jordan, MSLS Candidate

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**Faculty Advisor:** Deborah Barreauh, PhD., Assistant Professor

**UNC-Chapel Hill Department:** School of Information and Library Science

**Phone:** 919-966-5042 **Email:** barreau@email.unc.edu

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**MASS EMAIL SOLICITATION**

To: Decision-making participants in the planning stages of the large-scale collaborative digitization project under study

Cc: barreau@email.unc.edu

Subject:The process of planning a large-scale collaborative digitization project

I am contacting you because you were recently involved in the planning process for a large-scale collaborative digitization grant project (the proposal was submitted February 16, 2011). I am writing a case study of the process for my SILS master's paper and would like to interview you about your experiences and perceptions of the process. The focus of my questions will be largely on how obstacles were dealt with successfully and how decisions were made between potential alternatives.

The interview can take as little of your time as you like, but will not exceed 45 minutes. I will come to you, or I can interview you over the phone.

To learn more and to volunteer to take the survey, please see the attached information sheet.

*** Choosing or declining to participate in this study will not affect your class standing, grades, or employment at UNC-Chapel Hill. You will not be offered nor receive any special consideration if you take part in this research; it is purely voluntary. Your answers will not be anonymous to

me, but I can ensure confidentiality. To mitigate the risk of you being known, interview data will be coded to correspond to your school, but your name will not be used and contact information and response data will be kept separately on secure computer space. This study has been approved by the UNC Behavioral IRB (IRB Study No. 11-0467) ***

Researcher:  Kathryn Jordan, Masters of Library Science Student  |  jordanke@email.unc.edu

Supervisor:  Dr. Deborah Barreau, Faculty Advisor  |  barreau@email.unc.edu

## APPENDIX B – Information Sheet

**IRB Study #**11-0467          **Consent Form Version Date:** 3/17/2011

**Title of Study:** A Case Study of The Planning of a Large-Scale Collaborative Digitization Project Between Special Collections Libraries and Archives in an Established Consortium

**Principal Investigator:** Kathryn E. Jordan, MSLS Candidate

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**Study contact telephone:** 919.240-5975

**Study contact email:** jordanke@email.unc.edu

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**INFORMATION SHEET**

**IMPORTANT: You must be 18 years of age to participate in this study.  If you are under 18 years of age, please do not continue reading, as you are ineligible to participate.**

**What are some general things you should know about research studies?**

You are being asked to take part in a research study. To join the study is voluntary. You may decline to join, or you may withdraw your consent to be in the study, for any reason, at any time, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. However, if you choose, you may receive further information about the subject of the study after its completion. There are no foreseeable risks to being in this research study.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. Once

you have read this informational page, you can indicate your consent by responding to this email or calling the principal investigator.  If you wish to print this page for your records, you may do so at any time.

You may withdraw your participation in this study at any time and for any reason. You are also free to skip any questions you choose not to answer.

**What is the purpose of this study?**

The purpose of my research is to explore the coordination processes involved in planning a large-scale, multi-institutional digitization project in which participants have different roles, goals, and responsibilities.

**How many people will take part in this study?**

It is anticipated that fewer than 10 people will be interviewed for this study.

**How long will your participation in this study last?**

Your participation in this study will take approximately 10-45 minutes.

**What will happen if you take part in this study?**

If you take part in this study, you will be asked to answer a series of general questions and provide relevant anecdotes.  You will be audio recorded if you have no objections to that.

**What are the possible benefits from being in this study?**

Your participation in this study will help us understand more about how people coordinate in multi-institutional collaborations like yours.  There is little research on this topic as yet and the data you provide may inform future such endeavors.

**What are the possible risks or discomforts involved in being in this study?**

There are no foreseeable ricks to being in this study. However, there may be uncommon or previously unknown risks. You should report any problems to the researcher. Please use the email address or phone number provided if problems arise after you have completed participation.

**How will your privacy be protected?**

You will not be identified in any report or publication about this study. Because context will be gained from identifying home institutions, a code system will be employed to link you to your responses.  For example, subject "A1" will be the first interview with an employee from "University Library A."  Names and personal data, with corresponding personal code letters, will be kept in a separate digital file that will be stored locally on the Principal Investigator's personal computer; computer and file will be password protected in order to minimize risk of deductive

disclosure. Audio data will be deleted or destroyed once it has been transcribed or fully analyzed. All other personal data will be deleted at the end of the study when they are no longer needed.

The sole purpose of collecting personal data in this study (such as telephone numbers and email addresses) is to facilitate communication with participants and schedule interviews. Job titles will not be collected; only self-selected, generalized role titles may be used.

**Will you receive anything for being in the study?**

You will receive no compensation for participating in this study. However, if you desire, a copy of the completed study can be sent to you.

**Will it cost you anything to be in this study?**

It will cost you nothing to be in this study, other than 10-45 minutes of your time.

**What if you are a UNC student?**

Your participation in this study will not affect your class standing or grades at UNC-Chapel Hill in any way. You may choose not to participate, to skip questions, or to stop the interview at any time, with no affect on your class standing or grades in any way. You will not be offered or receive any special consideration if you do or do not take the survey.

**What if you are a UNC employee?**

Your participation in this study will not affect your employment at UNC-Chapel Hill in any way. You may choose not to participate, to skip questions, or to stop the interview at any time, with no affect on your employment in any way. You will not be offered or receive any special consideration if you do or do not take the survey.

**What if you have questions about this study?**

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the principal researcher listed at the top of this page.

**What if you have questions about your rights as a research participant?**

All research involving human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research participant, you may contact (anonymously if you wish) the Institutional Review Board at 919.966.3113 or at IRB_subjects@unc.edu.

**Participant's Agreement**

If (1) **you are at least 18 years of age**, (2) **you have read the information provided above**, and (3) **you voluntarily agree to participate in this research study**, please respond to this email or phone the principal investigator to set up a time for your interview.

Thank you.

## APPENDIX C – Interview Script

**Notes for interviewer:**

**Turn on recorder. State subject number and date and time.**

**There is no need to ask every question. Allow the conversation to move freely as needed but try to keep it relevant to sources used.**

How did you become involved in this project?

What were your responsibilities during the planning period?

What were your goals for this project as a representative of your university?

What were your personal goals?

Did you have expectations?

Do you consider the project planning process to have been a success?

How did your goals and expectations for the project change over the planning period?

Did the maximum award amount of $150,000 per year have any impact to these changes?

How or how not?

Can you think of any times where the group faced and obstacle in the project?

> What was the obstacle?

> How was the situation resolved?

Were there many reasonable resolutions suggested?

Who suggested the ultimate resolution?

> Do you think there are obstacles yet to be addressed in the project planning?

> > Why?  Could the issues have been resolved previously?

Were there points where the planning group had to decide between multiple, good directions for the project?

> How did the group decide where to go?

> Do you feel the best direction was chosen? Why or why not?

Are there things you would do differently in a future attempt at large-scale collaborative digitization project planning?

Other ways you would maximize quality or efficiency?

How do you feel about the activities that your institution will perform or oversee if the grant application is successful?

Will you have the resources necessary?

Do you think they are appropriate to your institutions' resources and expertise?

Will your library need to perform activities in advance of or outside the parameters of the grant because of grant activity commitments?  (For example, will you need to procure digital storage space?)

How do you believe this project planning process may impact future digitization efforts among the partner libraries?

Do you think it will have an impact on outside partnerships?

Did you communicate with the planning team during the planning process?

How and how often?

Do you think the level of communication was appropriate?  The means?

Tell me about how planning group personnel turnover effected communication.

Is there anything else you would like to tell me about the planning process for this project?