

Summer 6-28-2011

Digital Commons as an Educational Tool

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Citation

Jesperesen, John Kresten, "Digital Commons as an Educational Tool" (2011). *Faculty Publications*. 296.
<http://digitalcommons.ric.edu/facultypublications/296>

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ABSTRACT

This paper explores the educational use of an Institutional Repository at Rhode Island College. The focus is on selected units of our College's Digital Commons and the students who have helped to make it a reality. The Chet Smolski Collection, comprising an Image Gallery and a table for Op-Ed texts, are joined by relational portals that are not yet operative but approaching partial functionality. We claim that there has been real educational benefit for the students by using them to help construct an IR. Our educational approach of letting students teach each other can be of value to other Colleges and Universities creating an IR using library students. Giving the students the trust they deserve gives them a sense of ownership in the project and creates a congenial and collegiate atmosphere in which they can shine.

Digital Commons as an Educational Tool

Introduction

When the Library of Congress announced that it was going to concentrate on describing and cataloging its Special Collections, Technical Services in libraries around the United States trembled. This change in focus at LC came right after early discussions of the implications of FRBR and FRAD for the catalog were taking place, and about same time that new RDA protocols were being drawn up in the middle of the first decade of the twenty-first century. Libraries were finally beginning to cope with the rising costs of serials. The widespread move to Institutional Repositories also dates to this time, giving impetus to the free access to an institution's scholarship through the World Wide Web. But I think that the real impetus to develop IRs was the need to preserve and to give access to Special Collections and to collect and disseminate faculty publications and

student dissertations, theses, and undergraduate theses of significance. Greater access to the grey web was always a factor.

In 2006 the HELIN consortium (Higher Education Library Information Network) which is “composed of eleven academic libraries and fifteen health sciences libraries” chose to work with bepress’s Digital Commons. This is one of the largest consortiums in the country. A number of IR programs were considered in this decision: DSpace, an Open Archive Initiative (OAI) now 20 years old by MIT, CONTENTdm by OCLC, and Digital Commons by bepress. I believe that the superior technical support of Digital Commons was a factor in this choice. DSpace is open-source software, and our College would have been responsible for its own technical support had that software been chosen. Parenthetically, this was the same reason used by the Adams Library’s Digital Initiatives Department to choose FileMaker over open-source software to construct the database that would feed into the Digital Commons: trusted technical support.

HELIN harvests the Adams Library’s Digital Commons. The Smolski Collection, the focus of this paper, has been harvested into HELIN’s Innovative Interface Incorporated’s Encore. A quick look at the end result can be seen at:

<http://encore.uri.edu/iii/encore/search?formids=target&lang=eng&suite=def&reservedids=lang%2Csuite&submitmode=&submitname=&target=chet+smolski>. The results in

Encore show the usefulness of the collection to the general public, as well as to architects, urban planners, architectural and urban historians, urban geographers (like Chet Smolski himself), and most importantly, to students.

Digital Commons as an Integrating Resource

The Digital Commons as a whole is really a large, multi-faceted integrating resource. Even when there are individual projects that are either continuing resources such as a serial (in the case of Rhode Island College we are getting the educational journal *NALS* off the ground), or finite and limited projects like the 371 Op-Ed pieces written by Chet Smolski, we treat each as an integrating resource. This is because the collection as a whole is constantly being added to in the part; and as it is deliberately being added to in a somewhat random way, it is always changing and always growing, with some parts being current or up-to-date, some parts being finished, and some parts being added to slowly but with determination of an end in sight. The collection as a whole is never complete, but it is in the early stages that the exciting moments are encountered and the decisions made that affect the quality and shape of the collection.

Setting up the Digital Commons

The Digital Commons at Rhode Island College is in a privileged moment and just in the process of being built. The Electronic Theses and Dissertations (ETD) was the first element to be populated beginning on August 24, 2009. It and other parts of the Institutional Repository are under construction, such as the Smolski Images and the Smolski Texts, the Electronic Theses and Dissertations, and Faculty Publications. The publications for the Director's Office are also active, with the seventh and best newsletter, *From the Steps* by the Public Relations Committee of the Library having been published in the Spring of 2011. It was the College's most popular download on

the Digital Commons for several weeks during April and May of 2011. Some parts of the DC have not been built at all, but are waiting for the right moment for construction to be undertaken. An example is the Profile Pages / SelectedWorks module that required that the Faculty Publications be populated first so that these articles and reviews could be imported into the Profile Pages. This route means that statistics gathered on readership would be counted at the place of origin – Faculty Publications – and not be counted again in Profile Pages if that was where the publication was first accessed by a reader.

Creation of the Smolski Image Gallery

The first priority in setting up the DC was the creation of the Smolski Images Gallery to house digital visual content, some 8,000 slides of urban geography and architecture donated to the Adams Library by the widow of Chet Smolski, a Professor of Geography at Rhode Island College for 40 years. The focus of this paper will be on this gallery, one of the first image galleries in the whole of Digital Commons, and the associated 371 Op-ED pieces written by Chet Smolski. The first step was the creation of a database that would be robust in structural metadata, rich in subject metadata and the eclectic product of metadata standards relating to art and architecture as well as deferential to MARC 21 cataloging. The initial metadata creation was based on a “random” sample of two slides taken in Kharkov, Ukraine by Chet Smolski in 1979. Both had washed out color which is unusual in the Smolski Collection. One was identified solely as a “Scientific Research Building” and the other as a “public sculpture of a poet.” With the help of Google and Google Earth I was able to find both monuments. With the location of the building and sculpture secure, I found out through Google who the architects were, who the sculptor

was and the dates for their creations. The project seemed possible then based on the probability of our being able to research some obscure unknowns. The building turned out to be the Derzhprom or, Gosprom, or State Industry Building by Sergei Serafimov, Mark Felger and Samuil Kravets dating to 1925-1928, one of the earliest and most significant examples of Constructivist architecture in the world. The following illustration is from the FileMaker database, showing construction of the metadata fields and the thumbnail restored photograph of the Derzhprom taken by Chet Smolski in 1978.

The sculpture was quite easy to find through a Google search, but the building took considerable crawling through the streets of Kharkov to find! But since I was looking for a skyscraper, it was much easier to find than an anonymous vernacular building *sine loco* in a foreign city.

The scouring of Kharkov in Google Earth led to the idea for a .kmz field to be added to the database that would open the Smolski image in Google Earth directly. While Digital Commons has not been able to take advantage of this bit of cataloging, I am hopeful that they will be able to incorporate the .kmz files into the records in the future. While using Google Earth in urban studies is not new, the idea that metadata should be as rich as possible is uncommon. The cataloging of images should be as rich as and more rigorous than a MARC record, not less so. Nothing is “saved” by the simple way out. Access without content is as meaningless as a billion hits. Relevant and full information must be the goal of access if Archives and Special Collections are to contribute to the expansion of scholarly culture. I turned to my wife and co-author of this paper, Dr. Heather P. Jespersen who had created and populated the Archive of Early American Images database for the John Carter Brown Library, for help setting up the FileMaker tables. Her experience as a trained art historian and librarian was invaluable in creating a unique database. Not only did the database meet the demands of cataloging, but it also connected the two tables for the images and for the Op-Ed pieces through “relational fields” so that an Op-Ed piece will invoke a series of images based on theme, subject heading, and place and vice versa.

Creation of the Database and the Software Application

FileMaker Pro was chosen as the application for the database, because it allowed great flexibility, complexity, and specificity in its structure. Since the database will be built by large numbers of students over a period of years, one useful feature of FileMaker Pro is that it allows an explanation of the correct contents of its fields to be built into the database. If any confusion arises about what kind of data should be entered, the description of the field can easily be accessed.

The database was intended to provide as much information as could be gathered about each image in order to maximize search results and because it would become the sole repository of information about the images contained in the Smolski Collection. It is also hoped that the data will enable the Collection to be used as a resource for research in urban planning and architectural history. Fields that could collocate the images and fields that allowed an expression of the uniqueness of each image were needed. Fields that were essential for the creators of the database but that would not be visible to the end user were combined in one layout with those accessible by the end user. This allowed the most comprehensive view of the data to be constantly available to the students entering data. Two tables were created within one FileMaker Pro database: one for the digitized slide image and the other for the digitized OpEd text written by Professor Smolski.

In line with the new guidelines established by RDA, it was desirable for all the people responsible for the creation of the images and the buildings/sites to be

acknowledged. Repeatable fields for their names and information about their roles were established. Fields containing metadata about the digitized slides were also included so that future conversion might be possible (Although the original slides will be preserved, it is hoped that they will be digitized only once).

In order for the site to function as a research tool, it was necessary to include fields that could both organize results and bring researchers to relevant results with which they were unacquainted previously. These two goals were accomplished by establishing a number of fields that used controlled vocabularies to collocate results. Thus there are fields for building type, building style, themes, Library of Congress subject headings, and tags. If the user is unacquainted with the vocabulary used in the database, the terms can be chosen from the drop-down menus for building type, building style, and themes.

The Description field permits a discussion of the specific visual and other characteristics of a building or site to be brought out. Any visual content not accounted for in the fields using controlled vocabularies can be enumerated here so that if a user were looking for a very unique term or feature, it could be discovered here. Given the focused nature of the material in the Smolski Collection, this field could be very useful for “un collocating” what might occasionally be too broad results. The simultaneous searching of multiple fields can also be used as a way to limit results.

The database is also enabled to access an email account to which comments on its images or content can be sent. Since one of the values of the collection is that it

allows users to see what sites all over the world used to look like, information from users around the globe could contribute to the accuracy and completeness of the information presented.

It was decided that it might serve the end users well if the visual and text elements of the Collection could be searched simultaneously. In order to do this, the database had to be made relational by creating portals from one table to another – from the image table to the OpEd table and vice versa. The inclusion in each table of the same controlled vocabulary terms in fields with the same names allows a single search to find items in both tables that fulfill the user's query. For example, a search for the topic "Litter" would return both a group of images that Professor Smolski used to illustrate that topic and his discussion of the problem in an OpEd piece written for the Providence Journal. A thumbnail of each slide is included in each record of the image table, and a miniature of this thumbnail also appears in the portal in the related Op=Ed record. The .pdfs of the Op-Ed pieces also appear in the portal in the related records in the image table, so that the user can access them by clicking.

Creation of Finding Aids

The next step in the Smolski Tables was to populate the databases with appropriate metadata. To simplify this process, a number of Finding Aids were developed by Neil Hodge, then a senior in the College and very close to graduation, based on models and instructions given by the author. Pattern-like subject headings with their sub-headings were created as a basis for Neil Hodge to develop the list. The same procedure applied

to key words with which each record was tagged. Neil and the team of students also revised the aids that had come with the Smolski collection from Special Collections with a mind to make them more robust and useful for the future.

Each of the sixteen boxes of slides containing approximately 400 slides to the box was given a slide-by-slide brief description that is an aid to the student responsible for scanning the slides in our Nikon Super CoolScan 9000. These slides are scanned in batches of 5 each using Paul Hamrick's VueScan which allows for substantial correction in the scanning process. The few slides that are outside the range of VueScan correction are processed through Adobe's Photoshop CS4. Here is a senior student on the scanning problems in Digital Commons @ RIC:

"The process of archiving and restoring the images in the Chet Smolski slide collection involves few, but important, steps. First, we are fortunate to have Nikon's Super CoolScan 9000 EQ, which is a fantastic state-of-the-art film scanner. The Super CoolScan creates digital images at 4000 PPI, which pulls every bit of visual information faithfully from the slide and transfers it to the digital world. Coupling the Nikon with VueScan, a simple but powerful piece of scanning software, we are able to archive the slides in three individual file formats: RAW, JPEG, and TIFF.

The RAW file is the archival scan. It is made of the raw image data from the scanner. This file is invaluable for recreating the other two files in the event that either is compromised or lost. Using the RAW file and Adobe's Photoshop CS4 new files can be created and edited without having to make a new scan from the slide. It also allows a second chance at image correction if the JPEG file was improperly edited. In the

Smolski slide database, the file we care about most is the JPEG. A JPEG is ideal for our database; the compression makes the file size fast and workable while still yielding considerable fidelity, and therefore it is essential that the file be properly restored.

As the slides were taken across a span of nearly fifty years, each image is in a unique state of deterioration. Most commonly the slide will show an obvious color cast which can be easily removed. But time and storage conditions can have a myriad of unpredictable effects on films, and this is where the manual controls become invaluable. VueScan helps us to repair the effects of time and storage on the slides. It also allows us to compensate for errors in exposure.

Once the images are created and saved they are loaded into FileMaker Pro. The final step is to look at an entire batch of images side by side and note any image that has color or tone problems that couldn't be corrected in VueScan. Problem images are edited using Adobe's Photoshop CS4. Various combinations of curves, color balance and other layer masks allow virtually any age or exposure related problem to be corrected.

I have been fortunate enough to study digital imaging through both commercial photo labs and at Rhode Island College with Photography Professor Amy Montali. Working in the Digital Initiatives program has given me an opportunity to pass some of this knowledge on to the other students who may not have had the chance to learn these skills. The first and most important thing I can teach anyone is to trust their eyes. A slide scan should look as natural as looking out a window. Students tend to think that film is supposed to look unnatural, yellowish or washed out. The truth is that slide film is an accurate and durable medium that, when coupled with digital technology, yields

fantastic, accurate results. I suggest that automated corrections be disabled and teach them the functions of the various manual controls – most importantly: black point, white point, curve low, curve high and the various color controls.

We are fortunate to have wonderful equipment and high quality source images to work with. Working on the Smolski collection and having a part in presenting the images with the dignity and fidelity they deserve is a rewarding and enlightening experience.”

Andrew J. Davis (Senior, RIC, 2011)

Populating the Database

With the Finding Aids and a body of digitized slides established, the Smolski Images Gallery began to be populated by downloading the image from the Drobo server and checking that the number on the slide corresponded to the number of the digitized image and to the Unique Identifying Number by which the record is known. About 400 images were then downloaded into the Smolski Images Gallery table and the process of identifying the images and describing them with the appropriate metadata begun. The decision to focus on the City of Providence Plantations was practical and a matter of convenience: We had at our disposal William H. Jordy's *Buildings of Rhode Island* (Oxford, 2004), William McKenzie Woodward's *PPS/AIARI Guide to Providence Architecture* (PPS, 2003) as well as Rhode Island College Professors Francis J. Leazes Jr. and Mark Motte's *Providence: the Renaissance City* (Northeastern University Press, 2004) as resources for the students. These resources, together with sites on the Internet, provided the students with the sources for metadata and for a description of each slide. The students also specialized in creating .kmz files for each image as well

as using Google Earth for further research on the individual images. The creation of the .kmz files was researched by the author and taught by example to the students. No procedural file was generated until this thread of teaching was lost when the transition from student to student was broken. In all, four Finding Aids were created, three of them by students. The fourth Finding Aid on the 371 OpEd pieces by Chet Smolski is the product of Dr. Howard H. Foster Jr., Professor Emeritus in Urban Studies at the University of Rhode Island. Five more procedural documents were written up: on the Nikon Cool Scan 9000, on VueScan software by Paul Hamrick, on Photoshop “curves,” and on Drobo “crashes.” While one of these documents was created late in the project’s history, the attempt to organize *a priori* before any input of data has been a leading principle of the digital project.

Finding Aids and their Application to the Database

Neil Hodge was instrumental in taking my concepts for Finding Aids together with examples of what was needed, and creating fully fledged Aids that were as useful as they were remarkable. He writes that:

“The initial task at hand was to list the contents of the sixteen boxes of slides. Finding aids were drawn up as we combed the collection with the aid of a magnifying glass and the Internet. Some of the boxes contained a rough sketch of their contents under their lids, but most did not. Professor Smolski did, however, make many notations on the slides themselves, and this text was used to generate the finding aids and as the starting point for further inquiry. Although they were a small fraction of the overall

collection, unmarked slides presented some challenges, and some remained insoluble to the team. However, many unmarked images were able to be identified analyzing adjacent images in conjunction with Google Earth. Landmarks and other indicators were sought in the images, and the sequence of slides was compared with Google Earth to guess at the probable course Professor Smolski took on a given excursion.

I paid special attention to the boxes of Providence and London as they were to be the first to undergo the entire process of digitization and uploading. In addition to simply listing place names and quick descriptions as was done with the majority of the collection, with these boxes I tried to create a detailed list of dates, specific location information and other pertinent information from the Web to facilitate creation of the records in FileMaker. When available, I would store web links to other historic and contemporary photographs of the subject matter with the hope that they may be incorporated into the records for further context. For example, the website [ArtinRuins](#) provides fascinating photographs of many Rhode Island structures that were documented by Smolski. Smolski's subject was urban planning and development, so I often saw fit to pull together other images and pertinent information to illuminate the very theme the Smolski collection is concerned with.

Nearly every image from these two boxes was able to be given an approximate date based on the printed processing date on each slide. Sometimes, when slides had no printed date or it was illegible, we had to look for clues within the photograph. Advertisements and billboards in undated pictures often provided hints at the time frame. For example, we were able to determine with fair certainty that a photo of Piccadilly Circus was taken between the years 1979 and 1981 by researching the past

incarnations of the famous neon signs. Indispensable to this process was Wikipedia and the photo-sharing website flickr. By searching for photos of the neon signs during the time period in question it became possible to approximate when Smolski took the shot. Similarly, a series of images from New York City was given an approximate date because one image in the set showed Madison Square Garden's advertisement for The Jacksons' famous concert of 1983. Other times, the magnifying glass revealed helpful addresses, street signs, and architectural details that were then used in Google Web and map searches to find descriptive information.

A subject heading finding aid was also generated for the project. More than the other finding aids, this document undergoes constant revision and adaptation as the research process goes forward. I initially pored over Dr. Howard Foster, Jr.'s descriptions of Smolski's op-eds to find topical keywords that could be the basis of my list. These terms and keywords were then searched for in the Library of Congress Subject Headings index. The goal was to use these isolated words such as "Housing" and "Urban planning" as a jumping off point to discover the networks of related terms and concepts that could be used to describe the Smolski images. Subject headings were compiled into an alphabetical list, many of which contained a number of subsets and subcategories. For example, under the heading 'Architecture' are contained all the types of architecture (e.g. in terms of building materials, style of construction, or function) that were assumed to be represented in the Smolski collection. This list has become quite lengthy as the project has continued, but it is indispensable to being able to generate subject headings on a slide by slide basis without having to consult the multi-volume series of books." (Neil Hodge, RIC, 2010)

Inputting Metadata for the Smolski Image Gallery

Initially the Unique Identifying Number (by which the record is known in the FileMaker database) is entered and checked against the unique identifying number on the slide itself. Then the .jpeg is uploaded together with the structural metadata of the slide: image dimensions; software; date/time scanned; resolution; document type; color space; and file size. There are fifty-two separate fields in the table, not all of which are operative at the moment. There are, in keeping with the new Resource, Description and Access (RDA) standards, multiple "Creator" fields. The most important field for our purposes, is the "description" field, for here the digital image is thoroughly described; the sources for the description are put into a "Notes" field. This allows for single word searches that are not controlled. The keywords are taken from a Finding Aid using controlled vocabulary. Likewise there is a Finding Aid for the Library of Congress Subject Headings appropriate to the collection. There are drop-down menus for "Building type", "Building style" and for "Theme" each of which can be updated to suit the content of the Box collection being worked on at the time. The relational fields are not operative at the moment as sufficient data needs to be entered before "collocation" can be operative and functional. We will begin the project next year when we have reached at least 500 records and hope to apply for a small grant to get this final aspect of the tables functional.

The first hundred records were loaded over Labor Day weekend in 2010 in time for the Chet Smolski Memorial Lecture on September 30, 2010, a requirement of the Rhode Island Council of the Humanities grant the project received on January 13, 2010. Four

panelists described their involvement with the renewal of downtown Providence in an event sponsored in part by the Adams Library of Rhode Island College, RIC and the Royal Society of Arts. Two weeks later, a lecture on the making of the Smolski Collection database was given by Dr. Howard Foster, Jr., Dr. Kresten Jespersen and Neil Hodge, the student most responsible for the metadata of the first 100 records that were uploaded into the Digital Commons @ RIC. Filling in the Op-Ed pieces of the Smolski Text was the next step after this small success.

The Smolski Text Table

The Digital Initiatives team had the good fortune of acquiring a student, Kerstyn Desjardin, who hopes to complete her education after RIC with a MLIS. She describes her work in the project below.

“Since January of 2011, I have been working on the Chester Smolski Op-Ed collection. From 1970 to 2007, Mr. Smolski wrote a total of about 371 articles concerning everything from the state of downtown Providence and urban renewal to the opening of the EPCOT theme park in Orlando, Florida. The goal of the project was to have the articles sorted, scanned, tagged, and organized into one easily accessible database.

I began the project surrounded by boxes and boxes of newspaper articles, some of them originals but most of them copies, seemingly not in any particular order. As it turned out, the hard copies had been put in an order other than chronological, an order of no use to us in getting them digitized. Adding to the problem of ordering was the fact that many of the articles had five or more duplicates scattered throughout the boxes.

The articles were numbered as they were ordered, and eventually they were sorted into much more manageable file folders of twenty articles a piece. In the end, a total 61 of the 371 articles were missing from our hard copy collection.

Once the articles had been sorted, the next steps were to scan and edit them. After the scanning process, in which the articles were each saved separately as .jpps, I went on to use Adobe Photoshop to clean them up and piece them together. This step was not necessary at all for some of the articles, simple one-page pieces that had scanned cleanly and all as one unit. For most of them, however, a good deal of work was involved. The articles that were longer than a single page, or in multiple columns surrounded by bits of other articles, were trimmed down and pieced together in a process involving a great deal of cutting, pasting and cropping. After they were cleaned up and ready for use, each article was saved as a .pdf.

The final step in the project was actually to get the articles uploaded onto the online data base, and to sort them through a process of tagging and categorizing. To do this, I had to read through each individual article, which was a truly enriching experience. Mr. Smolski's outlooks on urban culture and the progression of Providence over a span of almost four decades was a foray into an interesting field of study I've never known much about. After reading each article, I went on to choose, from three separate lists, which subjects, disciplines, and keywords would best suit the article and make it easy to find in a search. This information, along with the title, author, publication date, publisher, source, and a brief abstract were all entered before uploading the file. After being approved, each article was posted to the Special Collections section of

Rhode Island College's Digital Collection homepage under the heading Smolski Texts. Each article has a cover page and a recommended citation for public use. At this time, we have 90 of the 310 available articles uploaded to our online database". (Kerstyn Desjardin, 2012, RIC). The following sample illustration is taken directly from Digital Commons:



RHODE ISLAND
COUNCIL
FOR THE
HUMANITIES

SMOLSKI TEXTS

How Cubans Reshaped Downtown Miami

[Chester Smolski](#)

Document Type

Article

Comments

Cuban influx positive effect downtown business.

Subject Headings

Behavioral sciences, Local government, Society, Minority & ethnic groups

Keywords

business development; business growth; city planning; community investment; downtown improvement; immigrants; multiculturalism; urban development; urban growth

Article Date

3-17-1978

Abstract

"It was just this past week that the last flight of refugees likely to come out of Castro's Cuba arrived at Miami International Airport. The highly emotional reunion of families that had been separated for years was a reminder of the freedom which we enjoy in this country and for which many others are still waiting to come here to also enjoy."

Recommended Citation

Smolski, Chester, "How Cubans Reshaped Downtown Miami" (1978). *Smolski Texts*. Paper 41. http://digitalcommons.ric.edu/smolksi_text/41

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Technical Support for the Digital Commons

None of the metadata could have been loaded into the Digital Commons without the help of the User Services of Rhode Island College, especially Joseph Carchia; Sarah Rodlund of bepress; and Dr. Heather Jespersen who cross-walked the many available metadata schema to arrive at a suitable arrangement for the Library. Without Joe Carchia the Digital Initiatives team would have stalled in complex computer issues beyond our capacity to resolve. The weak link in our equipment proved to be a Drobo Share which allowed the Smolski database on our Mac Pro (our server) to share the information with three other computers. This system had repeated crashes in the beginning of our work. While it stabilized for about a year, a big crash and a corrupted file with over 1200 images meant rethinking the computer system and once again Joe Carchia's brilliant solution to remove the Drobo Share, install two 3TB hard drives into the Mac Pro, and back up to the Drobo. We had, instead, been using the Drobo and the Share to manage our collection. The final result meant a huge increase in the efficiency of our workflow.

Sarah Rodlund's assistance has also been critical to the project. Bepress's Technical Department has always provided swift, timely and successful solutions to the many problems we have had as a team. We have always exported the FileMaker database to a 2003 Excel spreadsheet before uploading the data. This worked well with the uploading of 480 records for the College Slide Library, the first Image Gallery in bepress that went up with robust metadata in late May of 2010. The increased complexity of the Smolski Images finally meant the abandonment of a batch upload in favor of a manual

one-at-a-time upload. This suggestion by Sarah Rodlund has allowed us to speed up our work flow. We have uploaded three hundred and twenty-nine records (329) into our Digital Commons, and over two hundred have been uploaded in the recent past few months. Without Sarah's help this would not have been possible.

Finally, Dr. Heather Jespersen was instrumental in making this project come to life. Without her expertise in metadata schema and her experience with the Archive of Early American Images (AEAI) the project would have developed in an entirely different direction. Her experience in managing another librarian in the AEAI initiative has also helped in discussions of issues with the students and MLIS candidates on the Digital Initiatives team.

Student Evaluations of the Digital Commons as Learning Experience

Overview: The Smolski Image Gallery and the Smolski Texts are only a part of the Digital Commons @ RIC. But they are major instructional tools for our students at the College and have become a resource for the Professional Field Experience (PFE) at the University of Rhode Island's Graduate School of Library and Information Studies where the Drs. Jespersen are Adjunct faculty teaching a core course in the Organization of Information (LSC 505). Students learn to précis information, to think about content in the humanities that is often outside of their degree discipline, to manage multiple forms of information – Finding Aids, publications, web sites, Google searches, as well as direct instruction --, and to bring a project forward with economy and good spirit. The

following accounts by Cassie Ormonde and Heather Sochia are primary documents that explain the nature of their involvement in the Digital Initiatives:

Evaluation by a MLIS candidate:

“My experience thus far has been an exciting peek into the world of digital image collections, database development, digital records management, metadata, and the digitization process in general. The opportunity I have been given to work on this project by my supervisor, Dr. Jespersen and James P. Adams Library Director Hedi BenAicha has helped me both professionally and academically. As the field of library and information science moves rapidly in the direction of digital services, the Digital Initiatives experience is a chance to better understand the process, equipment, and research involved.

My role in creating the Smolski Collection has primarily been developing the metadata in the FileMaker Pro Advanced database. In keeping with the professional objectives of my PFE, I have had a chance to work with LC subject headings that enable the images to be recalled upon searching. The process has been an introduction to cataloging, an area in which I had no previous experience. In addition to the subject headings, the additions of tags to the metadata provide access through keyword searching. By far, the most challenging and rewarding aspect of working on the metadata descriptions has been uncovering the significance of structures and architecture that at first glance

seemed insignificant. After a considerable amount of researching, the feeling of accomplishment when a record is completely populated and ready to be uploaded is fantastic. I have found that organizing information, a foundation of librarianship, requires careful consideration not only of the obvious description, but also a broader understanding of what each slide means in relation to the collection. Despite the Drobo back-up crash, we were able to resume work on the collection quickly due to the preparation for the project by Dr. Jespersen. The amount of preparation saved countless hours of work and has been a lesson to me to be aware of every possible outcome when preparing for such a project.

The Rhode Island College Digital Commons site provides library users a chance to view original photography by Chet Smolski (amongst other forms of media) that were previously in storage. Now the images, some of architecture and neighborhoods long lost to demolition, are given a second life through digitization. The RIC Digital Commons enhances the depth and diversity of the library's collection through digital mediums. The collection also serves to meet the personal and professional needs of the library users, providing examples of art, architecture, and development throughout the country and abroad." (Cassie Ormonde, URI GSLIS, 2012)

Evaluation by a second year undergraduate:

"Over the past school year I have had the pleasure of working on the Rhode Island College James P. Adams Library's Digital Commons website. We currently have a strong team of 6 members working diligently on several aspects of the site including uploading faculty publications, the Smolski database and scanning in the thousands of

Smolski images. Upon first starting out on the job, there were 4 team members. I was responsible for finding the faculty articles and then inputting all of the metadata needed into the Digital Commons. Upon completion of this task at the end of the Fall '10 semester, our team had been depleted to just Kresten and me until second semester when 4 more students were added to the mix. Being the veteran student worker to the case, a lot of responsibility was placed on me to teach the newly hired members how to do basics such as scanning images onto the Drobo and uploading the remainder of the faculty publications. While I was teaching the new members of the team such tasks, I was also being trained by Kresten how to work with the Smolski images and upload them onto the site. Currently we are working on putting up all of the images in the Providence box of 400 slides. Being a native of Connecticut, these images tested my ability to problem solve and be able to do research on places and markers that I had never heard of. Thankfully, Kresten and my fellow team members are Rhode Island natives and aid in every way possible to figure out the significance of the image. Each photo is a new and exciting challenge to anyone who attempts to decode it. Usually if one team member can't figure out how to locate or describe the specific object in the photo, another person will be able to look at it and say, "Hey I know exactly what that is." Although working on this database has been extremely time consuming and at times very meticulous, it has been a personally extremely rewarding experience to have the pleasure of working on. The city of Providence has opened up so much for me and many significant and historical places that were once unknown to me I am now very knowledgeable about. As of today, we are about 2/3 done with the Providence box, a task that has taken many brilliant minds and much time to accomplish. Moving on to

other boxes such as London will be where all of our team's hard work will be put to trial. Everyone will be tested, having slim to no familiarity with a wide range of places around the world. We have added some key members to our team since the beginning of the Spring '11 semester, and I have the utmost confidence that we will be able to keep pushing along and uploading images at the constant rate we have been. About a month ago, the James P. Adams Library reached 1,000 items in the Digital Commons, a feat that was highly anticipated and noteworthy. In no time, I foresee that number being greatly increased due to the timely efforts of all of our team members." (Heather Socha, RIC 2013)

Conclusion

Since Heather Socha wrote that we had reached a milestone of 1000 publications in the Digital Commons in early May, we have added about 300 more publications and taken down about 480 publications that were password protected but were still being harvested by Innovative Interfaces Incorporated (III) Encore without a means to suppress them at this time. The present total stands at 823 publications, of which 459 are for the Smolski Tables. Heather Socha has uploaded over 260 faculty publications, an essential prerequisite to developing Faculty Web pages in Faculty Profiles/SelectedWorks. The latter has been the responsibility of Kerstyn Desjardin who has so proven her organizational skills that I would trust her with any complex archival problem. She wants to be a Youth and Young Adult Librarian, however. Archives have lost a promising librarian. But Kerysten should be well prepared to deal with the "Organization of Information," LSC 505, URI Graduate Library School's core course in

the introduction to cataloging, a hands-on practical course. Neil Hodge who goes on the same Library School this Fall has already demonstrated an unusual facility with Library of Congress Subject Headings. Both Library school candidates have been especially well prepared to master both the technology and cataloging requirements of the degree program. Cassie Ormonde is near completion of her MLIS at URI's Library School. She has proved to be a brilliant performer and I have assigned her the responsibility of the Smolski Image Gallery for her PFE (Professional Field Experience). The team has never been as productive as when Cassie has been in charge of the Image Gallery.

The most tedious part of the Digital Initiatives is the grind of scanning analog slides to digital images. Many students have had a crack at this job. Andrew Davis stands out above the rest. His training as a photographer under Prof. Ami Montali at RIC has given the team badly needed expertise that far surpassed my own experience in scanning and in Photoshop. We are now approaching 4000 scans. It is the quality of the scans that Andrew Davis has paid attention to, going back and revising weak or inferior scans which only he could have done economically with respect to the time taken. As an artist, Andrew has honed his skills in our Digital Initiatives Department and will become a teacher to the next student slide scanner. We as a team will be much better off when he departs since the key to the success of the team is that the students educate one another, passing along their tips and short-cuts, experiences and knowledge. The Digital team is itself by its very nature transitory and temporary. So the education by the Librarian is only part of the solution. The more important part is educating the team so that they can educate themselves. They are the ones who have entered the data,

uploaded the files into Digital Commons and scanned and corrected the analog slides. The students are learning both the PC Windows platform and the Apple OS. They are fluent in many software applications: we use not only FileMaker and Digital Commons software, but Adobe Photoshop, VueScan, Facebook to keep in touch with messages and reminders, Google applications, important research on the Web and traditional scholarship in books. They are taught not to plagiarize but to give credit in the Notes field for the sources of information in the Description field, and they are taught to refer problems to me. I am a trained architectural historian and the students have been using my mentor William H. Jordy as an authority for Rhode Island's architecture. They are, without knowing it really, part of a tradition of scholarship and education reaching from Yale to Brown to RIC. As they move on to Library School and become librarians, or become significant artists or productive citizens, I think that the experience they have had as educators of each other will profit them in the future. As cataloging takes a new turn with the inclusiveness of RDA, the emphasis on an inclusive metadata rich in searchable terms and with robust and full fields is the way to go that will satisfy the future need for access to information.

To create a student team one needs the full support of the Director, which I have had in Hedi BenAicha, and one needs to educate the students in the subject matter of the particular collection being uploaded into the Digital Commons. Therefore we concentrated on organizing our materials, a dull but necessary process not really appreciated until a student dropped a box of about 420 slides on the floor and we had the box back in order in 10 minutes! Secondly we have used Finding Aids extensively

so that the wheel of learning did not have to be repeated from one student departure to the next. Thirdly, I have given them responsibility which includes the responsibility to make mistakes which we correct as we find, but in the meantime plug along. My Director has been not only supportive in this; it is his idea and management strategy. Fourthly, because I am an Adjunct Professor in the Library School, we have old relationships among the tenured professors at URI, and the Adams Library is now participating in the PFE program in both Special Collections and the Digital Initiatives Department where students such as Cassie Ormonde can learn first-hand the cutting edge of "cataloging" in the twenty-first century. And we can recommend students to the GSLIS program based on close observation of their newly acquired library skills. I myself am most grateful for the students and the many others in RIC's User Services and at bepress that have helped me get a functioning IR up and running for Rhode Island College in less than two years. The students have been at the core of this experience. We have created an atmosphere of trust through the student-to-student teaching wherein they have a stake in the outcome of their own work and therefore want to make the Smolski Collection the best database possible. We salute them, librarians of the future and citizens of the digital age.