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Redesigning Visual Resources Facilities for 21st Century Challenges

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Abstract

Changes in our profession have been dramatic over the past ten years, not only in the services we deliver but also in the spaces where we work. In this paper, visual resources professionals from Smith College, the Massachusetts College of Art and Design (MASSART), Harvard University Graduate School of Design, the Rhode Island School of Design, and Ithaca College will describe a variety of strategies to repurpose their VR spaces in order to accommodate new challenges in the visual resource field—from complete redesigns to thoughtful reorganization of existing spaces.

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The changes in our profession have been dramatic in the past ten years, not only in the services we deliver but also in the spaces where we work. In this paper, visual resources professionals from Smith College, the Massachusetts College of Art and Design (MASSART), Harvard University Graduate School of Design, the Rhode Island School of Design, and Ithaca College will describe a variety of strategies to repurpose their VR spaces to new challenges in the visual resource field—from complete redesigns to thoughtful reorganization of existing spaces.

Evaluating the Information Commons Literature for Visual Resources

The library science literature has been replete with discussions of space redesign to meet 21st-century digital challenges and it may be helpful to review this work, as these observations become apparent in the pages following. A major trend that is identified by Jeffery Pomerantz and Gary Marchionini in their article "Digital Library as Place," is the rise of personal information space. An example of this can be seen on a faculty member's computer desktop with downloaded images, a portal to image databases, and links to favorite museum websites. This creates a digital space that faculty can inhabit in their office or home and often results in an empty visual resources space. The question arises whether personal space will replace the visual resources space or if the visual resources space will adapt to developing methods of instruction? In his article, "The Library as Place," Geoffrey Freeman points out that "the Internet tends to isolate… the physical space of the library does the opposite." The "information commons" is described as this type of library space, by Joan Lippincott in her article, "Information Commons: Meeting Millennials Needs": "physical spaces, hardware, software, digital and print collections and expert help (where) students can create a wide variety of projects"

The information commons model is often characterized by three objectives. The first objective is professional level equipment with staff members to assist users of the equipment**.** Elizabeth Milewicz, in her article, "Origin and Development of Information Commons in Academic Libraries," points out that a key draw for users to an information commons is equipment or software that an individual is unlikely to invest in on their own. The second objective is the opportunity to work in a space with digital and analog materials. Spaces where "emerging information technologies can be combined with traditional knowledge resources… that supports today's social and educational patterns of learning, teaching, and research" according to Geoffrey Freeman. The third objective is a smart workspace that encourages collaborative work. In their article, "Breaking Down Barriers to Working and Learning," Wedge and Blackburn recommend a space that "has access to technological tools…which entice the community to gather and create." These three objectives: professional level equipment and staff, a mix of digital and analog, and technological tools that promote collaborative work result in a final goal, as described by Bernard Frischer in his article "The Ultimate Internet Café": The library should be a place for the production of knowledge. Vandegrift and Varner state quite plainly in their article "Evolving the Common," "Making stuff indicates effectively that there is work being done … to provide content to an information hungry world." Knowledge production is a way for a facility to prove its value to the campus.

Will similar changes in visual resources spaces actually rejuvenate our mission? Donald Beagle

states that "a media booth does not turn a student into a scholar," in his article, "The Emergent Information Commons: Philosophy, Models, and 21st Century Learning Paradigms," but these "elements combined with a re-conceptualized service framework projected onto a reconfigured library floor plan… become something greater than the constituent parts." Howard Shill and Shawn Tonner's study, "Does Building Still Matter: Usage Patterns in New, Expanded, and Renovated Libraries," "showed that of those who refurbished or rebuilt their library about 80% saw a significant increase in users, provided the improvements included things like workspaces, good connectivity and quality instruction areas. As to what these users are doing as they return, Bernard Frischer, in *The Ultimate Internet Café,* offers this interesting statistic from the ARL— while circulation fell 7% (presumably for books) group presentations went up 61%. Time will tell if similar success will meet the redesigns described in the following pages (although early reports seem promising), but the objectives for the information commons can be seen in these spaces, and will likely be a useful guide to steering the future development of VR spaces.

Refreshing Visual Resources at the Massachusetts College of Art and Design

MassArt, like many institutions, has many space challenges to overcome. MassArt is a 140-year old, state-funded, freestanding school of art and design with a student population of about 1,900. The campus is a city block of hand-me-down buildings from the Boston Normal School and Boston State College, which MassArt took over in the early 1980s. The campus is very "lived in" and tight on space, but there has been significant investment in facilities in the past decade. However, there has been no renovation in the library space that houses the Visual Resources Department. The layout of the library is inefficient, with awkward office spaces, poor HVAC and, until recently, a leaky roof. It is long overdue for a complete overhaul. Funds have been allocated for design work with the hope that the library will officially make it on the list for renovations soon, but the visual resources department needed a temporary solution to make a better use of the space it has. In 2010, the visual resources space at MassArt was refreshed with no monetary investment in renovation. The space, formerly known as the slide library, has become a more open and flexible reflection of the department's current functions.
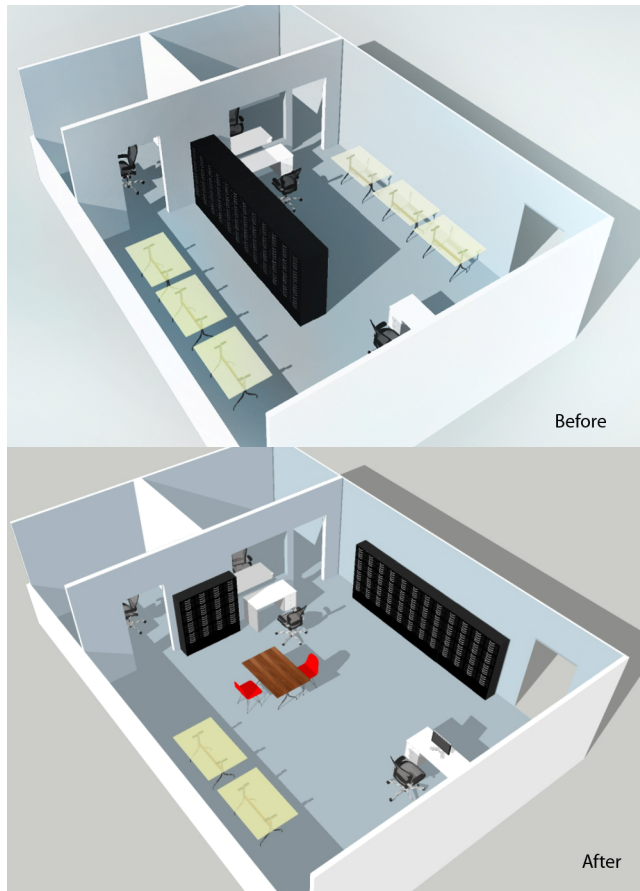
Before

After

Before and after mock-up of the MassArt visual resources space (Caitlin Pereira)

A number of design charrettes for the library were held with faculty and students without a single mention of a slide library. The space had a very traditional slide library layout with two back-to-back rows of slide cabinets bisecting the room, blocking natural light, impeding airflow, and making the space more intimidating and hiding the staff. Light tables lined the longest walls of the space. However, this layout does not suit the department's function as slides are no longer being added to the collection and hardly circulate. With a mainly digital focus, the services of the visual resources have become invisible, and the space reinforced this problem. A refresh was important to keep staff members visible to the school population.

While the institution was not ready to completely discard the slide collection, no changes could be made without dramatically winnowing down the number of slide cabinets. It was decided to weed the collection mostly of pink slides, duplicates, and images lacking solid cataloging information. This process de-accessioned over 35,000 slides, leaving 90,000. The weeding and shifting took a year of dedicated student labor but the rearrangement took only one week in the summer while the library was closed to the public. Drawers were also shifted that allowed us remove thirty-two cabinets. All but two light tables were discarded and the remaining slide cabinets fit neatly against two walls. The result was bright and airy but it also posed another challenge: protecting the space from being seen as underutilized.

As copy-work has declined, the visual resources department has begun to digitize more of the library's unique collections, which has naturally made the Archives a logical collaborator.

Previously, there was no properly supervised space for patrons to use archives materials. With the donation of a table and the promise to keep it clear, the archives was welcomed into the visual resources space and a modified reading room was born. It seemed like a good solution to help another department while keeping our new space relatively free of clutter. Since this collaboration began, there have been numerous occasions when this refashioned space has been the ideal location for viewing materials of all kinds. For example, the visual resources collection provides a supervised but relaxed space for patrons to view artist's books from Special Collections. In another example, one of the most frequently used archival collections is a selection of work by designer Muriel Cooper. This past winter, multiple requests for her work led the visual resources staff to digitize a number of items for publication and exhibition. The collaboration did have a downside when the archives made an unexpected and large acquisition. The Archives space has long been at capacity and, within a year of finishing the shift in visual resources, a large collection of posters arrived to be housed in visual resources.

Despite this, the space is now more functional, more inviting, and more appropriate to the current workflow and services of visual resources. We are in the sunset time of slides, and the new layout projects what the department does now, rather than its historical function. The changes will provide a better picture to the architects and planners of how the visual resources spaces can be redesigned to look towards the future.

Re-imaging the Imaging Center at Smith College

Smith College is planning to incorporate a Design Media Lab within the Imaging Center for use by students and faculty across a range of disciplines and academic programs. By renovating and reconfiguring spaces within the Imaging Center that have been made obsolete by technological and pedagogical advances, Smith hopes to provide students and faculty with classroom, production, and work areas that nurture interdisciplinary collaborations and promote active learning in visual, audio, and interactive media.

The need for collaborative learning spaces at Smith to accommodate and promote interdisciplinary, multimedia, and design learning was identified as a key initiative of the College's 2011 Information Technology Strategic Plan. The emergence of new media-design pedagogy is creating curricular needs that are not being met by the current lab, studio, and classroom spaces at the college. The faculty has articulated the need for a highly flexible computer classroom with moveable furniture, equipped with the technology that can accommodate multiple teaching styles. In researching and thinking about the uses of the Smith Design Media Lab, faculty and staff have been inspired by the similar interdisciplinary spaces that have recently been created at Duke University (Wired Lab), Carleton College (IDEAlab), the University of Colorado Boulder (Experimental Digital Art Studio), and Purdue University (Design Studio), among others.

The Imaging Center is situated at a junction of campus creative and intellectual activity for students and faculty. Adjacent buildings include the Museum of Art, the College Libraries, and the Technology Learning Commons. By locating the Design Media Lab in the Imaging Center, Smith will leverage the Center's role as a campus-wide nexus for students and faculty working

with digital imaging and its on-site staff of instructional technologists, digital specialists, librarians, and curators to offer a range of services in support of pedagogy and research.

The proposed Design Media Lab will have three main characteristics: flexible classroom area to accommodate formal classes and individual/small group collaborative student projects; sequestered spaces suitable for digital and audio production and space for supervised digital printing from color laser and 3D printers and plotters with multiple outputs. The Design Media Lab will embody these qualities and it will offer a workspace suitable for installation art, performance, 3D architectural or engineering design, printing graphic design, moving image, electronic and space visualization, and the exploration of new forms of computer-related expression. We expect the Design Media Lab will be the go-to facility when students need to work on a project that incorporates media.

The Lab will function as a space to foster "design thinking"—the application of design methodologies to identifying, framing and solving problems in any domain—and creative pursuits more generally. Programs using the space include Studio Arts, Art History, Architecture, Landscape Studies, Film Studies, Engineering, Computer Science, Arts and Technology, among others. The Lab will include a central "sandbox" space with eighteen workstations with extra digital displays, connected to adjacent spaces containing color digital printers, a 3D printer, and (eventually) a laser cutter, a sequestered space for digital captures, and open critique/mock-up spaces. All furniture and equipment will be reconfigurable to maximize flexibility for the wide variety of anticipated uses. Toward this end, the wiring will pull down from the ceiling, and the wheeled desks and chairs will accommodate a number of creative groupings and orientations. The lab will be ideal for supporting the dynamic nature of hands-on, interactive learning supported by rich technological resources, encompassing the paradigms of "problem-based learning" (from medical education), "design thinking" (from engineering), charrettes (from architectural practice), and art critiques (from the visual arts).

As technology changes the way students learn, faculty teach, and staff works, and as the learning sciences advance, there is need to provide different kinds of space for students to develop their technical skills while experimenting with different ways to represent their ideas in design. The slide library that once made sense for art study, no longer meet the needs of our students and will not prepare them for success in the world they will enter upon graduation. By repurposing a centrally located space within the Imaging Center, the College can offer an innovative space for creative collaboration among staff, students and faculty that may become a model for teaching and learning spaces in the future.

Transforming the Design Library at Harvard University for the 21st Century

A Materials Collection was begun at the Graduate School of Design eight years ago by a faculty member in landscape architecture, with the intent of integrating the study of materials used in the built environment into the curriculum. The collection was housed in a small room off the Fabrication Lab, near the Design Library. The space consisted of shelves, two or three computers, and was open only a few hours per week. Use of the collection was very low and it was difficult to expose the collection to the school. In 2010, the Design Library staff met with

the faculty supervisor of the Materials Collection and agreed that the collection should be more integrated into the life of the school and to move the collection into a more visible space.

The logical place to make space and have the collection make sense logistically and intellectually was in the visual resources collections space. The visual collections are in a huge space, about 90 by 25 feet, with slides, historic photographs, maps, plans, and postcards all on site. Despite these resources, analog usage was almost nothing. It was clear that perceptions of the visual collections were not very positive, not because of the service but because the idea of the "slide library" is outmoded to the faculty. The many cabinets of closed slide drawers gave a visual cue that images are hidden, unused, and an anachronism. The situation gave rise to rumblings about not needing the space or possibly the staff. This collaboration offered an opportunity to revitalize the visual collections because the materials could be integrated with digital images and show projects that use specific materials that we have in the collections. The need for the Materials Collection to have a more visible space and stronger support and our collective desire in the library to become more meaningful and more integrated in the life of the GSD seemed to come together.

The Materials Collection working more closely with the library seemed to be the right collaboration, given the library's staffing, skills in information organization, and stable (and *longer*) hours of operation. The two departments embarked on a series of discussions where they stated their goals, the problems that would be solved by integrating the materials and visual collections in the library, and what the impact for visual content might be. They wanted to change misperception of the library as static and not needing staff; to find a new way to show the library's involvement in the pedagogical issues of the school; to make the Materials Collection more visible, support its development and management more strongly, and have it more accessible through the library's open hours of operation. This led to the decision to create a new, integrated set of collections and services within the library. With this decision, the Library and the Materials Collection began to work on two new resulting challenges: the space and the new roles for everyone involved.

Both departments worked with the Head of Facilities and an architect to develop a renovation plan to be implemented during the summer of 2011. Space requirements for the materials collection included display spaces and shelving that incorporated lighting to showcase the collection, staff work space, flat surfaces for working with collections, shelving to hold a reference collection, space for computer workstations for users of the collections, a seminar space, walls that allow for pin ups for reviews, and storage space for faculty to store materials between classes. The visual collections were also re-imagined, physically and virtually. Decisions had to be made about what parts of the visual collections could find other homes. The historic photographs were not being used by faculty and students and could be stored off site. The maps and plans collection was eclectic, and with many map resources available online, it made sense to weed the collection, retaining a small collection of maps and plans on site. The DVD collection was moved out into the main part of the library and made much more accessible. It was agreed that the materials collection should be highlighted, while simultaneously helping faculty and students to make connections with other collections in the library. The result is a space that is a combination of collection and lab space, that is sought after by several faculty as a teaching space.

Once the space was done, the intellectual work of transforming and merging services began. Faculty advisor Jane Hutton managed everything in the old materials space, including hiring students, researching and obtaining new materials, overseeing the data entry, and integrating the collection into the pedagogy of the curriculum. The library staff oversaw the building of the digital image collection, managing the maps, plans, and other collections; cataloging; managing digitization workflow; and assisting faculty and students in finding and using collections. Moving the materials collection into the visual collections space offered the opportunity to have staff participate in many of the operations of both the materials and visual collections. The library staff learned about the materials collection and Jane and her student employees learned what the library could offer to the materials collection. They met regularly to start transferring the work of managing the materials collection to the library. The challenge for all was to figure out how to transfer knowledge. They worked to design a new database for the management of the collection and this group effort helped to make the transfer of knowledge happen more easily. The expertise about databases and metadata that library staff have, along with Jane's subject expertise, allowed for the knowledge transfer to happen through the course of discussions rather than through division of operational tasks.

The move of the materials collection into the visual resources space has had several positive impacts: the visual collections space has content that is visual and tactile, which draws people into the space; the materials collection is becoming integrated into coursework, which lets people see the integration of library content and pedagogy, and finally, the space looks contemporary and reflective of the activities in the GSD, which is a draw for students. It is a space that offers a new way to perceive visual collections by working in partnership with a faculty member to create these changes.

Transparencies to Pixels: VRC to VRC at Ithaca College

In the summer of 2008, the Department of Art History Visual Resources Collection at Ithaca College was given approval to start packing up for renovation. At that time the VRC housed a collection of 165,000 slides and eight light tables in a 458-square foot facility.

The new VRC was to be moved to the front of the building in a more visible position than in the previous location. During this time the department was given floor plans for review. The first-draft floorplan showed the visual resources curator's office hidden behind two walls. In the revised plan, this desk was moved to the center of the space, viewable from the hallway behind a glass wall, rather than a solid wall. This visibility shift allowed the VRC to be front and center, not only physically but as a focal point for the department. The new floor plan (589 square feet) included a corner section to allow for fifty-one Neumade cabinets to house the remaining slide collection for research purposes. With a plan in place the department began to weed the slide collection to consolidate what was going to be boxed up and shifted to the new facility. The collection was weeded by assigning the task of looking at every single slide in the collection and pulling all pink slides to several student assistants, then asking the students to start the process again and pull slides that were either duplicates and/or very poor quality. Each process took a semester to complete. At the end, approximately 100,000 slides were pulled from the collection.

The visual resources collection moved into the new facility in the fall of 2010. The Visual Resources Collection in the Department of Art History is committed to providing a "Learning Center" for faculty, staff and students, so the name was changed to the Visual Resources Center (VRC). As designed, the Ithaca College VRC is the main focal point of the Art History department as the first thing a visitor sees as one walks down the hall to the classrooms. The open design with glass walls makes the center highly visible and intriguing. Many students ask what the VRC is used for, so a slide was made for the LCD monitor explaining our services. The new VRC has since become a location for students to have meetings, to gather, and to learn new skills. It offers a 27" iMac with the Adobe Creative Suite and three computer workstations for the VRC student assistants to complete VRC projects. In addition, the large conference table is located in front of the room and we often have student group meetings, faculty meetings and smaller one-on-one meetings between faculty and students occur since it is such a convenient place to congregate.

Finished VRC space at Ithaca College (Randi Millman-Brown)

The VRC has become a valuable place for job training. The skills learned while working in the VRC have given the students the ability to obtain internships at the Museum of Modern Art, the Whitney Museum of American Art and the Institute for Urban Design in New York, and full-time positions such as Registrar at the Tate Liverpool in England. The students have utilized their skills cataloging images in databases, using Adobe Photoshop for optimizing images, and conducting research. Two students who have worked for the VRC for the past four years wrote that their experiences working in the VRC have been extremely valuable:

> *"My time at the Ithaca College Visual Resources Collection has taught me a number of valuable skills that I feel prepare me for work after graduation …I have gained great interpersonal skills, all while learning about new software and the organization of*

databases, which has prepared me for a job more so than any class has that I have taken.”
Amy Obarski
Cinema & Photography
Class of 2013

“As a freshman, this job helped me decide not to transfer to another institution because I thought the experience was unique and highly educational. As a sophomore, I identified this job and my volunteering at Carnegie Museum of Art to be the most valuable experiences to date in my college career… As an upper classman, this job directly influenced by ability to get a summer internship with The Museum of Modern Art Archives in the summer of 2012 and be a qualified applicant for a Cornell University Library position as an Image Cataloger.”
Jillian Scott
Planned Studies
Class of 2013

The VRC is also providing outreach to other departments on campus in new and innovative ways. In fall of 2012, a call was sent for participants to an exhibit, “Turn up the Transparency”. The VRC invited faculty, staff and students to come to the facility and pick up bags, each with fifty de-accessioned slides from the collection. They were asked to sign out the bags and to create a work of art using the slides. Students participated from almost every department on campus. The final pieces were exhibited in a show in November 2012.

Rebirth of Analog: How the materials Collection Saved the Visual Resource Center at the Rhode Island School of Design

The Graham Visual + Material Resource Center in the Fleet Library at Rhode Island School of Design doesn’t quite fit the notion of the redesigned “modern, digital-savvy VR center.” If anything, it harkens back to a centuries-old tradition of haptic, hands-on learning through the formal study and exploration of analog objects. It is nevertheless “modern” in the sense that it reaches outside of itself and across disciplines, that it speaks to concepts and ideas as much as the formal properties of objects, and it positions itself at the heart of the mission of, and plans for, the school.

The library’s informational brochure reads:

> “All of [the RISD Library] holdings fit in a single bookcase [at its founding in 1878]; by 1909, however, the library had expanded to occupy two rooms and its collection had grown to include more than 2,000 books, 6,000 photographs and 300 lantern slides. In 1937 the library moved to RISD’s newly built College Building on Benefit Street, where it had ample space to house its collection of 12,000 books and bound periodicals. However, the library’s collections continued to grow along with the college itself and by the late 1990s it was noticeably overcrowded, with almost a third of its holdings needing to be stored off-site. In

2002, when Fleet Bank of Boston agreed to offer RISD a portion of its former bank building that was designed in 1917 by the renowned architectural firm York & Sawyer and listed on the National Register of Historic Places. Now that the Fleet Library at RISD provides nearly four times the space available before, all of the collections have been consolidated into a single, convenient center for research and study."

When the new Fleet Library opened in the 2006-2007 academic year, it afforded an extremely generous allocation of over 2,000 square feet for a slide collection that, while still heavily used and dear to many faculty, would soon face the reality of the digital revolution in instructional technology: declining slide circulation, fewer acquisitions, and fewer patrons. By 2010, the slide collection and space had effectively become unutilized.

A material samples collection at RISD had been discussed for many years, with the recognition that material interrogation and exploration is central to a fine arts and design divisions—a majority of the twenty-two departments at the school. In fact, many departments had already begun to collect and maintain small collections of materials. Gathering such localized collections into a centralized resource and centrally supported location was finally realized in 2009 with the outfitting of the hallway outside the slide collection with bookshelves akin to the stacks of the main library collection. The number of materials was small and the materials themselves were not terribly interesting or innovative, but they were foundational. Proof of concept was provided by the growing enthusiasm of students and a few key faculty.

In 2010, a development strategy was initiated as follows: first year build a critical mass of material samples by surveying design literature, websites, and blogs; second year focus on facilities enhancement; and third year develop a taxonomy and database structure now envisioned as an open shared union catalog among contributing schools via a partnership with Harvard University's Graduate School of Design.

In the past three years, a handful of grants were submitted to develop the materials collection on all of those fronts. The proposal to the Rhode Island-based Champlin Foundation for a physical renovation was met with their lack of familiarity with this type of collection but with great curiosity and interest. An on-site visit from Champlin in fall 2011 with support from RISD's upper administration led to the funding of the project. The renovation project took place over ten weeks from the week after commencement in early June to late August 2012 and the room was finished and collection reinstalled just in time for fall semester orientation.

The collection as a learning and event space has been embraced by the school at every level: the offices of the President and the Provost regularly schedule events and walk-throughs, hosted corporate visits, the new faculty orientation; deans and department heads hold meetings and retreats there; and faculty across the school are using the collection for material exploration that range from purely formal inquiries such as light-conductive materials for a class project to design a lamp to issues-based inquiries such as the history and ethics of material use.

To quote from RISD's recently adopted strategic plan titled, *Critical Making|Making Critical:*

> "The highest priority proposed for the plan is to enhance our educational model—
> one that nurtures critical making, thinking and innovation through immersive,
> disciplinary learning and engagement in the practice of art and design. The plan
> ranks research, critical making and innovation, student engagement and diversity
> among its priorities. … Successful implementation of this plan will enable RISD
> to prepare our students to be thinkers, makers and innovators."

The Material Resource Center is thus aligned perfectly with the strategic plan, which is perhaps
the strongest consideration when imagining a new visual resources facility.

Conclusion

The objectives that characterize an information commons recur a number of times in the space
designs described above. Smith, Harvard and Ithaca mention the incorporation of equipment and
software in their designs, as well as visible staff to assist. Harvard, RISD and MassArt have
incorporated analog materials into their collections. Smith, RISD, Ithaca and Harvard spaces are
designed (or are to be designed) with group workspaces that incorporate technology for learning.
Interestingly, there are other trends that recur in the descriptions that may be specific to visual
resources centers as they move to a new space model. One is the collaboration with other
departments to incorporate analog collections or equipment. Another is the need to increase
visibility or change the perception of the visual resources space and staff. How well these
objectives are met, and how well these new spaces are incorporated in to the pedagogy over the
long term remain to be seen. But it is clear that many visual resources spaces are on the journey
to becoming a place for the production of visual knowledge.

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