

VIUS Reports 7.1

External Review

Comments on the VIUS Interim Report from External Readers

By invitation, the following people have read and commented upon the VIUS Interim Report. These comments were gathered during summer, 2002. The VIUS Project Team was very grateful for these comments and discussed them extensively. We found them consistently perceptive, very helpful, and found as well that we could not disagree with any of them – perhaps an indication of the complexity of the issues in digital image delivery. Many of the comments resulted in revisions in our work and our reports. Many of the comments were valid suggestions for broadening our research or digging deeper into the data that we had obtained. While the suggested efforts were desirable, the time required by other work often left them unaddressed. A synopsis of the readers' comments follows.

Chris Bailey, Head, School of the Humanities, University of Northumbria at Newcastle, and a founder and member of the Advisory Committee of the Institute for Image Data Research there.
(<http://www.unn.ac.uk/iidr/staff/chris.html>)

Katharine T. (Kody) Janney, Coordinator, Digital Initiatives Program, University of Washington Libraries, formerly with Corbis, and frequent speaker on digital library projects.

Linda McRae, Head, College of Fine Arts Visual Resources Library, University of South Florida
(<http://library.arts.usf.edu/mcrae/mcrae.html>)

Peggy Seiden, College Librarian, Swarthmore College, and author of user studies employing protocol analysis.

Maryly Snow, Librarian, Architecture Slide Library, Department of Architecture, University of California/Berkeley and co-creator of the SPIRO image delivery system.
(<http://arch.ced.berkeley.edu/people/faculty/snow.htm>)

Joan Stein, Head of Hunt Circulation/Resource Sharing, Carnegie Mellon University Libraries and author of an award-winning user study and other service evaluation articles.
(<http://www.andrew.cmu.edu/~joan/start.html>)

Christine Sundt, Visual Resources Curator (Professor), Architecture and Allied Arts Library, Visual Resources Collection, University of Oregon, and author of research on many aspects of visual resources management, including user studies. (<http://oregon.uoregon.edu/~csundt/cv.htm>)

Beth Forrest Warner, Director, Digital Library Initiatives, University of Kansas, and author of publications on digital library development.
(<http://kudiglib.ku.edu/Foundations/Orgzn/WarnerCV2001.html>)

Reader 1

Here are my comments on the Visual Image user study. I'm afraid I have not had time to do it justice; even the executive summary was a lot at this point in time.So I just got through the first 12 pages...hope the comments below are useful.

I have included a few notes from info we gained in our image use survey. Ours differed from yours in that it was web-based only, was sent to 60,000 people and had 400 respondents. The respondents were evenly split between faculty, undergrads, grad students and staff.

General Comments: I would have liked to see a more traditional executive summary. It was hard for me to walk away from this knowing what the main points really were.

Specific comments –

Maybe discuss the difference between images and pictures.

The 1st section brings up the relationship of usability (i.e. content vs. usable content.) Expand.

[Our] survey confirms that the faculty want images for teaching.

[Our] survey indicates faculty don't use digital images for teaching currently because of resolution issues, inability to project multiple images in the classroom simultaneously (they all use PowerPoint), the lack of classrooms with appropriate technology, as well as no digital images available that they want (and they don't want to scan the analog ones themselves.) You might want to incorporate these reasons as some of the speculations in your report.

What does "outreach" mean on your campus?

Does independent learning = studying for classes? If not, that's a separate activity, as is creating reports/projects for classes. We have this independent learner concept that is the same as the life-long learner.

[Our] survey indicates that web and personal photos are main sources of images – web even more than personal collections. Note that I don't have the break down of that usage by campus status (i.e. faculty, undergrad, etc.)

Do AMICO and AP have the image rights and ability to use in teaching and independent learning that users want? Do people even know these collections exist? (i.e. is lack of knowledge of the collections a factor in their low use. Image collections are not normally seen as an OPAC offering.)

The Individual Collections section certainly argues for digital rights management information embedded in the image.

The features of a collection management system should be pulled out of the Individual Collections section and get their own section. After all, this is a major phase of the project.

It seems like a desirable feature of a system would include assistance with copyright questions.

Have you considered a centralized system that allows individual collections to be shared or not? Also allowing library metadata control on some collections and individual control on others?

Metadata: Why did you not choose other metadata schemes? Please spell out the reasoning for rejection. For example, how about METS? Also please elaborate on how images should get IMS when books and journals don't. How does IMS affect the people using images for research? How would all this metadata enhance your images and help them to work together?

I would suggest finding out what items, if missing from an image system would prevent it from being used.

Are shared collections with bad metadata useful?

What level of metadata really has to be put in for usability within campus? Did you study the metadata that users want for these purposes, as opposed to what metadata experts say is necessary?

What about controlled vocabulary?

What sort of business model is there for this?

Can you provide a solution for people who need help organizing a collection they don't want to share?

How does the image system interact with classroom teaching systems?

I will be very interested to see what kind of response rate you get to obtaining the images wanted by faculty, and how much time it takes you to do the image selection and obtaining portion of this. One almost wonders if identifying basic areas and putting masses of images in those areas might not be a better approach. I assume in these fields for study "any image of" will work well. In many fields there are very specific images that are needed.

How did you come up with these specific metadata fields? How do they match to DC, VRA and IMS?

How do the Picture Library and LionShare relate to each other? For instance, how do images move from one to the other?

I guess one thing I am a bit confused about in this report is what is the grantable part of developing a CONTENTdm™ system. Is it the specific curricular specific approach you are taking to developing this project?

Anyway, good stuff. I am really looking forward to staring hard at the data. I'm pleased to see that it validates the data we have collected as well.I learned a lot from the 12 pages I did get to read.

Reader 2

Introduction

You state that you hope your project will be useful to other institutions. The currency of its focus on digital images and recently developed delivery systems, makes this study very valuable to the many institutions, especially academic libraries, that are considering adding image collections but have little or no knowledge of visual resources management or use. It should also be of value to those system developers such as Luna Insight™ who would like to reach an educational audience but have not yet adapted a system originally designed for museums to the very different needs of a teaching environment.

User expectations

The study notes that while those surveyed use many digital and analog pictures and were quite supportive of an image delivery system at Penn State, they reported very little use of the two subscription image databases, AMICO Library™ and AP Photo Archive™. My informal observation at my own institution would support those findings as well as your explanation being primarily an issue of content (or lack thereof). In the study of Art History, most faculty would never think to look into the AP Photo Archive although it might have limited use for some contemporary courses. The AMICO Library should be of more value but since its content comes from American museums, it too has its limitations. The problem of using AMICO's to support the teaching of Art History is that it was not put together with this purpose. It contains what is available from contributing American museums. Traditional slide collections have been built specifically to support teaching and contain images of objects in museums all over the world, images of objects not in museums such as architecture and anthropological sites, and images of all kinds of odd didactic and ethnographic materials. Until digital databases contain this kind of content, faculty will continue to use those analog sources that meet their needs.

Disciplinary scope

The study states that an interdisciplinary image service may have to take into consideration two types of users—occasional and frequent users. My guess is that this will not be the primary issue in regard to an interdisciplinary image service. The issue will most likely be cross-disciplinary searching because each discipline relies upon its own very specific terminology—terminology that can be conflicting. Careful consideration of content, high level filters, and options to search by discipline will help.

Basic demands of the academic setting

Teaching:

The discrepancy in faculty stating that an image delivery system would be most useful for teaching rather than for research while at the same time they are currently using digital images for research rather than for teaching is not hard to explain. While research is currently enhanced by web access, teaching is not necessarily. When researching, one generally is looking for a single object or a very limited number of objects. The chances of finding an image of one object on the Web are far greater than finding all five hundred images you might need for a single course. Even if you could find all five hundred images, you would have to have the technological knowledge to download them, organize them in PowerPoint presentations, not be too fussy about their quality, have the necessary equipment in the classroom to project them, and then turn your lectures into html for student study. All of these services, skills, and equipment are not currently in place. One of our art historians recently told me “as soon as the classroom is equipped, the digital images exist, and the system is easy for me to use, I'll go digital. Until, then, I'll stick with slides.”

Independent learning:

The less you know (e.g. students), the more access points you may need. Generally faculty know what they want and your assessment that they are accustomed to having one access point into a slide collection is true. The one thing that the study won't show is what may happen when faculty become accustomed to having many access points. I think they may begin to use the greater access points available to them and that in turn will have an effect on the way they eventually put together their lectures.

Collection management:

Collection management is often the least understood or valued aspect of digital image services while at the same time it is at the heart of an effective system. The survey's assessment of desirable features from a users perspective is important and the decision to try to work with two different systems makes sense considering the varying needs of the users, but I know of no other institution that is trying to use both types of systems in a complimentary way or of any other situation where many individuals with no knowledge or cataloging skills might be asked to provide descriptive data for image records. It will be interesting to see how this works.

Metadata

Have you discovered a metadata standard for environmental sciences similar to the VRA Core for art and architecture?

Image database options

I have not seen Content dm but I am fairly familiar with Insight and MDID, neither of which function well as image databases. While they were both designed as image delivery systems, neither can be used as a cataloging utility. My own assessment of both Insight and MDID is consistent with the study. Insight's lack of flexibility makes it a particularly poor choice for the academic environment. In the visual resources library at my own institution, we are considering MDID primarily because it is free. If Penn State can make Content dm supply those features the users have said they need, it may be the best choice currently available for libraries needing to serve a variety of disciplines.

**Prototyping
Picture Library**

Will the same fifteen metadata elements be used for both the arts and environmental studies?

Will the elements incorporate fields for both display and indexing? Date fields for example that often need qualifying text require both.

How well does Contentdm™ handle authority files in order to control vocabulary?

Are those same authority files able to operate behind the scenes in a search? This can be particularly important where terminology such as object name can be identified from very narrow to very broad concepts, e.g. cassone, chest, furniture.

It looks as though you will not begin by trying to have several separate collections but eventually, this would probably be the most effective way to go as long as you provide a top level way to search across them because each discipline has its own specialized vocabulary and being able to limit a search by discipline or subject area might be desirable in a very large database.

It appears that you plan to use only one authority per field. What happens when, for example, LCNAF does not have the name of the creator? Ultimately, specialized authorities and vocabularies will be necessary. LC authorities, for example, are often not specific enough for art history documentation. A mix of authorities can create problems and not much study has been done on that but images, unlike books, ultimately require a finer granularity in terms of terminologies and LCNAF and LCSAF often fall short.

Prototyping Peer-to-peer Lionshare

Two noteworthy examples that I have seen of this sort of experiment [of gathering many collections into a common resource] are at [institution 1 and institution 2]. [Institution 1] has been at it much longer and in their last annual report, I read that they have finally realized that one major drawback to these aggregator systems is that there is no control over data content. Using XML stylesheets may give some level of standardization to the metadata elements themselves but it does nothing to control the data values placed in those elements. Mapping metadata in order to integrate records that come from a variety of sources will give you a top level of access but it doesn't match the kind of system that depends upon all catalogers using the same controlled vocabularies, the same rules for data entry, and the same extensive metadata designed for a specific type of content. I'm sure your developers know all the institutions that are using peer-to-peer systems but if they haven't talked to the folks at [institution 1], they might want to.

At a top level, it may be possible to apply short lists of terms users will have to pick from (e.g. art, biology), but once you get to names of people, places, events, objects, the lists grow way too long and need to be very specialized. For any real consistency, those metadata elements require authority files and inexperienced users—people who are not trained catalogers—shouldn't be expected to be able to make such fine distinctions, yet, for any really good database, these distinctions are necessary. If you plan to integrate the more controlled collection, Picture Library, with Lionshare records, how can the data be reconciled? Picture Library records will be created using at least one authority file for each field. If your contributors to Lionshare don't use the same authority files, how do you expect to integrate variations in names of people for example?

These questions suggest to me another issue and that is the effect of database size on your assessment of the results. Some of the things you want to try may work OK in a fairly small set of records but the larger the set, the greater the potential for inconsistent data and your model may not contain a large enough number of records to give you a real idea of how well the system will work.

Despite the dubious nature of these questions, I think this experiment is both courageous and worthwhile and that you are bound to learn a great deal from the project. Equally important, your analysis will be very helpful to many other institutions that have not yet taken such a leap. I look forward to learning about the second phase and I appreciate being given the opportunity to comment on this interim report.

Reader 3

I read the VIUS report with great interest.

Starting with the first 12 pages as you recommended, I found I had a number of questions, but these are answered very adequately by the detail in the succeeding sections. Overall, I must say that this looks like the best founded of any of the higher education image database projects I have seen, and the most likely to reach some sort of sustainability in volume of usage or critical mass in terms of numbers of users.

My comments are those of an interested amateur rather than an information management professional, so I hope they are not too tendentious. The findings from the surveys and focus groups are very much as I would have expected from the research I've been involved in myself. We found that our [system] users reported very similar 'obstacles to adoption' and 'ideal features'. You don't make this observation, but the pattern of responses suggests that there may be some tendency on the part of faculty respondents to cite practical issues, such as copyright, lack of IT support, or time to acquire the skills, to mask a deeper scepticism about the value of new technology. Sometimes, as you observe in the report on the focus group, the comparison of 35mm slide and digital image for presentations to groups does not flatter the new technology. The 'slide lecture' is the teaching format habitually used by faculty in some subjects, but as teaching styles become more varied under the impact of a range of initiatives, from 'outreach' and 'distance learning' to 'social inclusion' the old conventions may be expected to fade.

The usage figures are fascinating. Obviously you feel that prototype development has the capacity to increase the relatively low levels of use of digital images, and I would agree. We have AMICO at [our institution], and it works for a couple of our art history group but even here usage by staff other than the really keen did not happen until someone wrote an Access front end to make it easier to view the collections, and our slide librarian offered to store the 'finished' presentations for future use.

I was interested to see that you found twice as many students as faculty (by percentage) using digital images. This bears out what [a] colleague told me they had found [at another institution]. Students are expected to mimic in their independent learning the research activity of the lecturer, but with a more closely defined set of objects or ideas. It suggests that it could be a good strategy to emphasise student learning in the prototypes, as this will drag the less willing faculty into adoption.

There are, I feel sure, differences between the subjects that will influence the extent to which the prototype services are used. You distinguish between lecturers who want identified objects and those who want general illustration. I found Peter Enser's fourfold categorisation of image users' queries more precise. In the case of your user groups, it may be that an agriculture lecturer wants a picture showing 'well grown corn', and any image showing this will suffice. But someone doing a lecture on Manet's *Dejeuner sur l'Herbe* cannot make do with any sylvan scene, or any other painting by Manet. Since only that image will do, the appropriate search technique specifies the object uniquely, whereas the agronomist may profitably make use of 'content based' image retrieval. The choice of 'history of landscape design urban development' as the subject for the picture library is an astute one from this perspective, since it will permit more success as the result of unrefined search queries.

As you note, in most disciplines, teaching is held to be less 'private' than research and therefore more likely to draw on shared resources or technologies. Broadly, for teaching purposes, art historians seem happy to regard their subject as 'corpus based' i.e. as based on known delimited set of objects. When we look at their research practice we find it is odd, therefore, that art historians, unlike say linguists, haven't really made much use of digital images or of computerised analysis of images singly or in groups. This seems to be to do with the feeling you report of the collection of images as an intimate part of the 'teaching craft', which gains its value from the extent and completeness of the research-driven 'visual repertoire' of the individual. Sharing of images and databases seems not to be natural in this culture as it is for corpus linguists. It would be fascinating to see how this plays out for your sample.

The 'peer to peer' service is a very clever device in this context. I find the sections dealing with copyright interesting, and hope it can be made to work. I am sure you are right that if it helps individuals with their own collection management there may sufficient incentive to participate. I wonder if there are enough 'peers' in any one University, though, and whether this part of the service would really take off if promoted through one of the national or international subject associations.

Reader 4

Overall, I thought the study and the report were very good. As you indicated, you are planning to do more analysis of disciplinary differences. This seems to me to be a critical issue. In particular, there would seem to be essential differences concerning the importance of presentation software between those in the visual arts, art history or architecture and those in the more scientifically oriented disciplines. [At our institution], the quality of presentation was found to be one of the most important issues for art historians and studio art faculty. It also seems that search criteria/preferences will likely break down along disciplinary lines.

While, in general, the base line data gathering strategies were sound, I have one suggestion for further study - field studies of how faculty search for and use images. These field studies could take place in both faculty offices and in the art history slide collection, as well as other centralized collections. During these studies, one could observe faculty as they prepared to use images for a class and then have them talk about the "task." This could better elucidate what criteria are critical for them in locating images and using them. For example, I can imagine that someone in Ag is probably using slides for identifying pathologies, identifying specimens, etc. Doing field studies would help understand disciplinary differences and would provide better data on how use of images for teaching differs from use of images for research. You need to understand by discipline heuristics people have for locating the right imager.

In several places you bring up the issue of conflicting data concerning people's use of largely analog images for teaching, but their desire for digital images. This does not strike me as in any way unusual. I have found that there is general agreement that digital images have great potential for teaching, but that the work involved and concerns about classroom tech reliability are major barriers. So you are right to say that expectations are quite high. Another issue we have found both [at our institution and another one], is that the maintenance of centralized analog collections requires all the time of the staff assigned and moving ahead with any large scale digitization would require additional staffing. Furthermore, you may need to explore what variables impact comfort level with using technology, such as level of staff support; quality of equipment; how do computer upgrade cycles vary in the different disciplines.

In your final analysis, you might want to chart what characteristics are most important to teaching, research, collection management for different groups of users.

Lastly, it might be useful to find out where people are finding their digital images - Are they creating them? What sources are they using on the Web? Again, by discipline.

Reader 5

General

Overall, this was a very interesting and rich look at the use of image collections and the need for better management and presentation tools. While the observations and results are preliminary, there is already a great deal of information that will help inform similar discussions and investigations going on other campuses. Many will benefit from this study, particularly if the observations can be generalized into recommendations for future tool / system development directions.

Specific Comments / Questions

Did the group consider use of the OAI protocol for harvesting metadata from distributed collections to help bridge the gap between the central system and the distributed systems that would be accessible via the P2P network? This could help address the need students expressed for easier ways to check multiple image sources, better metadata control and provision, and potentially provide ways of discovering and minimizing duplication from the user's perspective. It could also help encourage sharing of metadata for access while allaying concerns with retention of ownership / control of individual images / personal collections.

While CONTENTdm™ has many good features to recommend it, there are several limitations with the openness of the system that need to be addressed – the OAI protocol has not been integrated into the system yet; metadata structures are limited; cross-collection searching is limited to collections loaded on a single instance of the system; and presentation tools are somewhat limited. While it will be useful as a prototype system, these limitations may influence the reaction to the usefulness of a central system.

An area that may require additional exploration is a more explicit breakdown and exploration of modularizing the functionality of an image management and presentation system. The focus group responses are somewhat mixed and inconsistent regarding the importance of content versus tools (cf. responses of faculty groups to demos of systems that emphasized different aspects of a fully functional system – when content was available, it was downplayed in comments on importance in favor of tools; when tools were available, they were downplayed in favor of content). In particular, the ability to separate the presentation tools / client from a specific database / system may need more explicit investigation.

Descriptive metadata for individual items is being explored during this study. Is any more detailed thought being given to the need to develop standards for structural metadata to describe presentation sequences, annotations, actions on images, etc.? This type of standard could potentially help modularize the content, description, and presentation components of system.

Additional exploration of the usage patterns and needs of owners of large personal collections would be interesting. What constitutes the bulk of these collections – personally created images? Images culled from other collections? If the bulk are culled images, are there tools that can be explored to help with linking to and management of distributed images to build virtual collections? What are the reasons personal collections are built? Etc.

The List of Ideal Database Features ... will be very helpful to others in either evaluating vendor offerings or informing local development.

In looking into the future, are migration / preservation issues for the University community as a whole being factored into the choice of system architecture? While centralized systems may create a higher bar to general participation, they offer a more controlled environment in return. The P2P system has a low participation bar but may incur more problems in the future as standards change and users lose access to collections based on old formats. Policies, beyond copyright, regarding use and support of institutionally supported collections vs. personal collections should be explored before a specific system architecture is adopted.

Also re: migration issues, it was interesting to note that on-the-fly conversion of files from a master image ranked as a level three priority in the [ideal] database features. How much consideration is being given to future file management / migration issues in the study? Is this an area that needs further investigation?

How will the information gathered be generalized for use beyond the PSU environment? Are there plans to expand and replicate the surveys at other universities? Will specific recommendations to vendors be made for development directions? Will additional standards development recommended? Etc.

Reader 6

Thoughts on the VIUS Interim Report #1

This interim report will become the basis of the final report, and probably the basis for a grant or proposal to your own institution. Both the interim report and the final report could also be very useful to other institutions grappling with these same issues. Therefore, my comments as based in the belief that your work WILL form the basis for the future of image databases in general and for centralized image databases in particular. For that reason alone, the tentative tone of the first section is problematic. An interim report often serves as the basis for the final report, and for future proposals in that one often copies and pastes or adds onto an interim report. Therefore, I hope you take the time to make some of the small edit changes that I've suggested. These are generally organized around two themes: making the tone of the report more positive and less tentative; making the information and issues more clear.

I see VIUS as part of a continuum of image database projects that Mellon has funded, from their study of the cost of digital and analog image distribution, under the direction of Howard Besser and Robert Yamashita, available at <http://sunsite.berkeley.edu/Imaging/Databases/1998mellon/> to ArtStor and the user information study you're doing. Your report should build upon some of Howard's and Robert's report, so the continuum is more apparent.

I would like to see the Overview clarified and expanded and posted.

The differences between faculty and student expectations (copyright assistance, more metadata, etc) seem to be essentially the difference of experience, which comes from age. Faculty are accustomed to slide libraries, students accustomed to the web. Faculty know that copyright is problematic, students are only just starting to learn it. I could go on, but you get the point. The differences between these two user groups should not lead you to create different products, but to understand "where they're coming from".

You make a distinction between production lag issues and individual versus group use of images that is interesting, but one that I think should not be treated as a dichotomy. These are not opposed to one another. They reinforce one another. All the issues that tend to prevent faculty from teaching with digital images, as well as the individual versus group issues, could be expanded to support the need for BOTH a centralized image database and your peer-to-peer system. It would be really cool if the two systems spoke to each other somehow.

You make an unconvincing distinction between images in teaching and research. Teaching images are those that have already been found and evaluated. Picture-searching behavior is the same, whether one's goal is teaching or research, isn't it? Your search behavior doesn't change with your underlying purpose. It is the search that is the critical issue, not the end usage. Also, don't forget that research is easier to fund than teaching, so a centralized image database, which is generating a lot of excitement among your faculty, could meet a long standing but heretofore unfunded need, instructional support.

A centralized image database, to be truly effective, needs to go beyond resource discovery to resource organization, whether one calls it a soft light table, an electronic carousel, or a portfolio. Finding images is step 1. Organizing them is step 2. Research and/or teaching can be seen as step three, which could be classroom teaching, illustrating a publication, creating a website for instruction, etc.

You held 3 faculty focus groups with 3 software packages: Insight, MDID, Content, and the presentations were held in that order. I suspect that if you had reversed the order, your faculty would like the last package the best, because there is considerable learning curve involved in image database & presentation software in general. And in particular, Insight has the steepest learning curve with the most functionality, so it is the most difficult to learn. It should not have been presented first. I bet if you took the same faculty and did 3 more focus groups, but this time reversing the order, you'd get different results. Also, you provided 2 exposures to the much simpler MDID. While I think you get close to some of the pertinent issues with Insight, Insight is ever changing and improving. They are very vested in feedback from their user community. Administrative tools are much enhanced, making creation of images and importing of records much easier and faster. They have not solved, yet, the individual collections issue.

Henry Pisciotta
9/2002

Reader 7

[From handwritten notes on a printed copy of the report:]

Is there any way to survey users as they exit from existing image databases on the web, like the AMICO database? Could a short survey be made to pop up there?

Will you do talk aloud protocols of people working with various image databases?

[Noted on the report of the first faculty focus group, at the point where participants expressed interest in further "support group" discussions:] Maybe sponsor a small conference?

[Noted on first page describing surveys:] Any incentives used?

[Noted where we mention that analysis of open-ended survey questions has not begun:] Atlas ti software?

[Noted on questionnaire, at the list of current activities with Likert scale responses, this additional activity:] Studying images for personal research and/or further self-education.

[Noted at mention of our iterative planning process as justification for mid-stream changes in plans:] This is also the process of naturalistic inquiry in social sciences. (Gathering qualitative, user-based data).

[Noted at the plan for faculty interviews:] I think the interviews are important. They're less structured than focus groups. Conduct them in the user's own office or usual workspace. To process the narrative data, Atlas ti software is good. It lets you see relationships and create clusters of topics.

[Noted at the end of the last page sent:] What about benchmarking?

Reader 8

[Notes from a telephone conversation, all wordings are approximate:]

General Conversation:

You should release your report – make it public. This too seldom gets done with these things

I want to emphasize:

Printing output: slide labels – are still important

This has already been suggested to the CONTENT dm designers

make a pitch for doing both –not all or nothing – the water is so cold but we expect people to plunge

Student review of digital images works fine now. That's fairly popular.

Use of private collections....sometimes works.

There is a community of being in the slide library. It's an important social interaction in a department.
[Sharing – not just image sharing – happens there. Thoughts about teaching, etc.]

Some question about what you are doing, if your strategy is to accumulate everything into your own institution's database.

P2P is an appealing idea.

But perhaps its not just sharing – perhaps its also a gathering place

There is a need for sharing resources not just files

– a shared support system is needed too

[One institution] used equipment and some help for bait in exchange for faculty collections.

[Another institution] has faculty grants \$500 & experts who do "house calls".

Biggest impediment [to digital image delivery] is copyright – until university legal councils as a group take up this issue... we can't move forward.

- Consider sponsoring a copyright symposium

METADATA: Good that you are keeping it simple.

Interdisciplinary description will be tough. This is well demonstrated in Tansey-Simmons system [an important slide classification system begun in the 1960s] attempted to include history & science – It was too simplistic outside of arts fields.

High Expectations: Yes. Relatable to my experience

Earth and Mineral Sciences users – interesting! Why? How are they different? Need to study them more – might have been some work on this at [another institution].

Yes! Yes! Yes! --- Teaching vs Independent learning uses –

But there are important differences between learning & researching
slide library is lab for art history

Student emphasis on quality makes sense because they are the ones interested in printing out the image

Individual collections: Most faculty know they need to describe them, but few find the time. Nonetheless, they may be critical of the way you manage and describe their collections.

CONTENTdm™ was a good choice

Rights issues ??? (e.g. Ag Faculty)

“Enthusiasm, but will they use a system?” This is a very good question.

Interdisciplinary use – difficult to achieve and support.

What is the right content? – That’s a moving target.

Will they find value in shared collections? – Partly a personal issue?

Need click-through sequence to make sure that P2P users really want to share anytime they are about to share. “No that’s not what I meant!” reaction is to be avoided.

User contributed data. Yes, lots of buzz about this, but someone needs to try it.

- Authority control and even quality control will be a big task.
- Even existing faculty identification of slides they shot is often wrong.

Flexibility is key to equipping classrooms – a very important obstacle.

Higher expectations are never matched with more dollars. That sets up a situation where failure is likely.

Web searching (keyword) is the normative behavior we must accommodate it – Dirty searches [high recall-low relevance] are OK with pictures.

The p2p points are good!

Pictures catalogued individually in a library catalogue don’t usually work – overloads users with hits. Same problem in p2p metadata server display?

Lots of the interdisciplinary picture use is probably edutainment.

The use of pictures to teach Anthropology (at our institution) is sort of new. Why are they just coming to them now? [We speculated about redefined courses – active learning – MTV impact – more & easier access to pictures.]

Note that 20% disagree that the classroom is adequately equipped.

Integrated presentation tools: – PowerPoint is always mentioned – has anyone really looked for something better? Is free more important than good?

Students think PowerPoint is too packaged!!!- (According to your student focus group.)