INTRODUCTION

As an intermediate step in the assessment portion of the Virtual Image User Study (VIUS), the VIUS team organized two demonstrations on the Penn State University Park campus in January 2002 at which faculty were asked to evaluate the Insight system.

Participating in the sessions were 20 Penn State faculty members. These individuals had mostly been identified through earlier work of the VIUS team as likely “intense users” of images in their teaching, research, and/or service work. The 90-minute sessions each included a 20-minute demonstration of the Luna Insight system; discussions were moderated by members of the VIUS project team and audiotaped.

LUNA INSIGHT™

Faculty evaluated the Insight software package -- an image management and presentation product of Luna Imaging, Inc.™ The demonstration included two image collections (from Cornell's Herbert F. Johnson Museum and David Rumsey Map Collection). The two groups viewed an online, live demonstration of Luna Insight via a high-speed Internet connection.

PARTICIPANTS

The 20 participants represented the following areas: agronomy and soil physics, anthropology, architecture, architecture and integrative arts, art museum (curator), biology, classics and Mediterranean studies, fine arts, forest biology, landscape architecture, plant pathology, theatre, visual arts, and women’s studies and English.

WRITTEN SURVEY

After viewing the Luna Insight™ demonstration, the participants completed a one-page written survey. Table 1 presents responses to the written survey. Because small samples such as this are not suitable for parametric statistical measures (mean, standard deviation, t-tests, and the like), only simple, descriptive, summary techniques are considered methodologically appropriate.

Any statistical interpretation of Table 1 should be very conservative, as only 11 of 20 participants completed and returned written survey forms. Nonetheless, the signals, such as they are, are not very positive in terms of how these faculty members saw Luna’s ability to meet their needs.
## Table 1

**Faculty Evaluation of LUNA INSIGHT™: Written Survey Responses (N=11)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree or Agree</th>
<th>Neutral</th>
<th>Disagree or Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.1 I feel that it would be worth my time to familiarize myself with the integrated presentation tools that were demonstrated.</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Q2. The inability to incorporate my own images into a presentation would be a serious enough drawback that I would not be able to use the integrated presentation software.</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q 3. The inability to download images from the database to use with third-party software (e.g., PowerPoint) would be a serious drawback that would prevent my use of the system.</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q 4. In general, if I had the choice of only one, I would prefer using integrated presentation software over third-party software (e.g., PowerPoint).</td>
<td>2</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Q 5. Being able to have my students view, outside the classroom, presentations that I have created using the integrated presentation tools would be valuable.</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q 6. Even though I could use the integrated presentation software, I would still need to download images.</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 7. I currently use, or plan to learn in the next year, one or more third-party presentation packages (e.g., PowerPoint).</td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## DISCUSSION OF ISSUES

Faculty participants were asked to comment on what they saw as the strengths and weaknesses of the system.

### Speed

In both groups, within the first ten minutes of the 90-minute sessions, participants began commenting negatively about the slow responses. There were no unusual technical delays or interruptions, but typical comments were, “In a classroom, a 15-second wait for a slide is forever,” and “The slow speed is a problem for presentation.”

### Reliability

In both groups, again within the first few minutes of each session, faculty members began to voice concerns about the necessity for Internet access to fully utilize Insight. Reliability and ease of use for classroom and other presentation settings is a significant concern. This is especially true since most of the processing is done at the client end – so basically anything that can go wrong, at the Luna end or the classroom, and anywhere along the network between the two, could potentially spoil a presentation.

### Downloading Capability

Luna has limited capability to download data from Luna onto, for example, a laptop hard drive, but this was seen as only a partial solution to the problems of speed and reliability. We believe that not all images can be exported, and in any case only thumbnail-quality images can be downloaded in this way.
Collection Availability
Luna appears aimed at the management of specific institutional collections. Faculty are concerned about whether the images they need would be accessible through Luna, and whether Penn State would or should spend the money for all the various collection subscriptions.

Image Management, Yes – Content, No
One participant offered an analogy between image management software and word processing software. His idea was that excellent word processing packages are strong because they function well as programs, not because they include collections of good writing. Similarly, a strong image management system might conceivably have no content at all, but simply provide the user with a useful set of tools. Another participant made a similar point, saying “We shouldn’t look to Luna as a way to get access to collections. Our goals are those of users. We want to be able to access anything, anywhere.”

Flexibility in Adding Individual Images
Participants place a high value on the ability to pull together many images from an eclectic variety of sources (slide collections, books, the Internet, and so on), especially for presentation uses, and to do this as easily as possible. This is not a strength of Luna.

Flexibility in Using Other Software Tools
Participants clearly want to be able to manage images and design presentations using tools of their own choice, such as PowerPoint, Photoshop, ImageMaker, or whatever. Again, this is not a strength of Luna.

Luna Insight™: High Quality
The faculty participants see Luna Insight™ as very high-quality, very well designed software that is excellent at what it does. For example:

- The presentation format is attractive and effective.
- The metadata input and search functions work well.
- The metadata shown in the demonstration were sufficiently detailed and valuable.
- The various display format choices are useful.
- Luna appears capable of working with images in a sufficient variety of formats (jpeg, gif, etc).
- The ability to embed URLs, to allow real-time linkages to images or text on other sites, is a nice feature.
- The ability to set resolution helps minimize transmission times while delivering images of appropriate quality (as determined by the user).
- The available high resolution can produce images of extremely high quality.

Turnkey Advantages
Within its constraints, there clearly could be some advantages to Luna Insight or any turnkey package. Cost considerations aside, Luna could sidestep some of the setup hassles for faculty members who want to organize their own local collections. If a lot of Penn State faculty would organize their collections through this method, it would be a way to improve sharing of images and information.
High-End versus Quick-and-Dirty
Several participants commented on the difference between Luna Insight as a high-end product and the typical faculty member’s need for quick-and-dirty solutions. The tradeoff with Luna’s approach involves accepting a well-designed, but constrained, limited, and rigid tool, and giving up flexibility and local control. While the high-end advantages are significant and applicable to some situations – for example, for collection curators – they are probably not germane to most faculty members who use images. For the typical faculty user, flexibility, speed, reliability, and ease of use are important; low- to medium-resolutions are usually sufficient; and a minimalist approach to metadata is probably realistic.

Other Comments
As we have seen in other faculty focus groups, the participants in these sessions continue to look for help with their own or their departments’ image-management needs. This is where they see immediate gaps – that is, in university policies, assistance, and/or improvements in areas such as:

- curatorial help in organizing and labeling personal or departmental slide collections;
- converting slides to digital formats;
- copyright/fair use policies and practices;
- controlling access to images (e.g., people might be willing to share photos or slides but only if they could be sure of getting them back; they might be willing to share images but only with colleagues in their own department or college);
- relative ease and flexibility in collection management;
- establishment of or guidance about standards (e.g., preferred file types, resolution, file size);
- support for the highly labor-intensive job of digitizing individual or departmental collections;
- campus technology (server size, speed, dependability; technology-friendly classrooms; some fairly poor quality equipment -- computer projectors, lighting, blinds -- even in so-called “technology classrooms”) that support image-intensive teaching;
- clarification of (and possible revision of) university policies that encourage or discourage external links for online courses.

Benchmarking
A question was asked about the extent to which the VIUS team is benchmarking with other universities in terms of their experience with packages such as Luna Insight™, or the ways they are managing image use. Is there more the team can do on this?

Conclusion
Luna Insight™ is probably not a solution that large numbers of faculty would use for the work – teaching – for which they use images most often. As one participant said, “There are huge potential practical advantages to digitized images for managing and using images for teaching.” Supporting the use of images for teaching is not the only goal for the VIUS project, but based on this faculty feedback, teaching probably needs to be a priority.

Luna Insight™ does appear to be an excellent tool for some uses, such as by curators of museum or library collections, or for some faculty researchers. However, one participant said that a free (i.e., university-supported) software package or system for scanning, data entry, and management that all faculty could be encouraged to use, even if the capabilities were fairly basic in comparison to Luna, would be of more practical use.
If the goal is to have a relatively quick and large-scale positive impact on faculty and student image use at Penn State, the adoption of Luna Insight would probably not be a high priority for these participants.