

VIUS Reports 2.4

General Survey of Students

Study Implementation. A total of 2966 students were invited by email to participate in the Student Image Use Web Survey. The initial emails were sent out October 29, 2001. To acquire a respectable response rate, follow-up emails were sent to non-respondents. The first follow up email was sent on October 31, 2001 and the third and final email was sent on November 6, 2001. Acceptance of responses ceased on November 15, 2001. The number of completed surveys was 598, providing a 20.2% response rate.

Respondent Demographics. The majority of the student respondents were white (82.2%). Gender composition was 41.7% male and 58.3% female. When examining academic level, 76.2% were undergraduates, 9.0% were in Master's programs, and 14.8% were in Doctorate programs. Graduate students are somewhat over-represented while undergrads are slightly under-represented. Scholars, undergrads who are in the honors programs, are the group that is most over-represented but still make up only a small portion of all returns. See Appendix III, Student Survey Demographics for details.

Questionnaire & Raw Figures. The following pages contain the text of the paper questionnaire. They also contain figures to represent the responses to each question. Analysis of the open-ended questions has not yet begun.

Student Survey – Visual Image User Study

N=575 out of 2966 (19.4%), Graduate=138 (24%), Undergraduate=436 (76%)

(This representation of the questionnaire reproduces the full text, but not the formatting, of the original.)

Definition of Images: For the purposes of this survey we are defining images as still pictures in any form and of any subject (but excluding images containing only text, such as an outline of a lecture or an excerpt from a book). Original works of art or unique historic artifacts are excluded from this survey, but reproductions documenting art or artifacts are included. We distinguish between analog and digital images as described below.

Analog Images: This term will be used for still pictures that are not in an electronic form, including photographs, slides, diagrams, drawings, maps, pictorial overhead transparencies, magazine and newspaper clippings, etc.

Digital Images: This term will be used for still pictures in electronic file formats (including jpg, tiff, gif, pict, bmp, etc.) It can also include images resulting from 3-dimensional modeling or graphic information systems. Digital images include those derived from analog images such as scanned photographs and slides.

SECTION 1:

1. Do you use analog or digital images for class assignments, research projects, or other educational purposes?	___ Yes 313 (54%)	___ No 260(45%)
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If **Yes** then please skip directly to **SECTION 2**
If **No** then please continue.

2. If you do not currently use analog or digital images for educational purposes, do you foresee yourself beginning to use them in the next three years?	___ Yes 118 (46%)	___ No 139 (54%)
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If **Yes** then please skip directly to **SECTION 3**

SECTION 2:

Regarding your use of analog and digital images for educational purposes, please indicate the relative importance you place on these activities. *(1 = not important, 5 = very important)*

322 responses, values are percentages

<i>Check one box for each phrase</i>	1	2	3	4	5
3a. Showing analog or digital images for group viewing.	2.1	4.3	11.3	46.3	35.9
3b. Arranging analog or digital images into sequences for presentation.	2.5	4.9	14.8	39.8	38.0
3c. Saving or recording sequences I have created for future use.	4.6	9.9	19.2	31.9	34.4
3d. Altering analog or digital images (cropping, changing contrast, file formats, resolution, colors, etc.)	5.0	10.0	16.0	33.0	36.0
3e. Scanning pictures to create digital images. Or having them scanned for me (including digital photo processing services).	4.3	5.9	14.2	32.8	42.7
3f. Using analog or digital images to illustrate papers, publications, reports, etc.	1.6	6.6	13.5	36.4	42.0
3g. Using a digital camera to create digital images.	11.2	10.2	22.4	28.6	27.6
3h. Obtaining digital images through a Web search or from a Web site.	2.5	2.8	12.8	35.5	46.4
3i. Putting digital images on diskette, CD-ROM, or similar media for others to view.	4.0	6.5	19.6	34.5	35.4
3j. Posting digital images on web pages.	8.7	9.3	23.9	30.8	27.3
3k. Overlaying or superimposing analog or digital images.	11.0	15.7	31.7	27.0	14.7
3L. Reviewing and studying analog or digital images to prepare for tests.	17.2	13.8	27.0	25.1	16.9
3m. Sending digital images via electronic mail.	7.5	11.2	7.1	42.2	22.1
3n. Creating image maps (digital images containing hot links).	17.1	17.1	29.2	23.6	13.0
4. Have you ever searched for digital images in the AMICO Library™ database?	___ Yes		___ No		
	10 (3.1%)		317 (96.9%)		
5. In the AP Multimedia Archive™ (formerly AP Photos Archive) library database?	___ Yes		___ No		
	18 (10%)		304 (90%)		
6. Approximately how many images do you use in a typical semester? <i>(Please indicate with a numeral – not a range.)</i>					
___ Analog images Average 34 (s.d. 86), range 0-700,					
33 out of 285 (11.6%) used no analog images					
___ Digital images Average 57 (s.d. 149), range 0-1500,					
26 out of 297 (8.8%) used no digital images					
7. Approximately how many analog and digital images do you use in a typical semester? <i>(Please indicate with a numeral – not a range.)</i>					
___ For class assignments	Average 36 (s.d. 94)				
___ For independent research projects	Average 32 (s.d. 110)				
___ For other educational purposes	Average 24 (s.d. 62)				
8. Is your use of images primarily creative? (with the goal of making original works?)	___ Yes		___ No		
	143 (46%)		168 (54%)		

Regarding your **ways of finding** analog or digital images, please indicate the relative importance you place on these activities. (1 = not important, 5 = very important)

312 Responses, values are percentages

<i>Check one box for each phrase</i>	1	2	3	4	5
9a. By place names or geographic coordinates (Paris, France, 48:50:14 N 2:20:14 E, etc.)	20.2	15.7	22.8	20.5	20.8
9b. By chronological categories (1998-99, the Sung Dynasty, etc.)	16.3	12.2	28.8	27.9	14.7
9c. By name of the creator (architect, artist, engineer, etc.)	12.0	10.0	18.8	30.7	28.5
9d. By pictorial media (paintings, photographs, maps, diagrams)	6.5	7.4	20.3	39.4	26.5
9e. By name of item depicted or theme (dog, Battle of Hastings, landmarks, etc.)	2.6	6.7	13.8	29.5	47.4
9f. By visual similarity (to a picture I have or remember)	11.0	11.3	37.1	29.7	11.0
9g. By formal characteristics (color, texture, composition, style, etc.)	14.5	17.0	30.2	26.4	11.9
9h. By visual qualities which are not predetermined (I'll know it when I see it)	10.3	9.4	31.3	28.7	20.3

When looking for and using analog or digital images, please indicate the relative significance of these **obstacles**. (1 = not significant, 5 = very significant)

307 Responses, values are percentages

<i>Check one box for each phrase</i>	1	2	3	4	5
10a. Too few good sources (collections, compilations, etc.)	3.9	6.8	22.0	39.8	27.5
10b. Too many pictures and sources	12.7	22.2	32.2	27.4	5.5
10c. Your way of searching does not match the way the pictures are organized/identified.	2.9	8.5	33.6	34.5	20.5
10d. The right equipment is unavailable.	7.5	15.4	31.5	29.5	16.1
10e. The equipment is too hard to use.	15.7	18.6	31.7	23.2	10.8
10f. Poor quality reproduction.	6.2	8.9	23.0	36.1	25.9
10g. The images are insufficiently documented(identified, dated, etc.)	5.6	13.4	28.4	35.6	17.0
10h. Loan, permissions, or copyright considerations.	10.1	11.4	29.7	27.8	20.9

11. Do you make use of a collection of analog or digital images managed by a department, center, museum, library (not including the pictures in books or magazines), or other university service? ___ Yes ___ No
103 (33.3%) 206 (66.7%)

12. Do you personally keep a collection of analog or digital images for educational uses? ___ Yes ___ No
135 (44.0%) 172 (56.0%)

If so, please estimate the number of images. (Please indicate with a numeral – not a range.)
 _____ **Average 318 (s.d. 820), range 1-6000, n=137**

SECTION 3:

For each of the following statements, please indicate your level of agreement.

(1 = disagree strongly, 5 = agree strongly)

420 responses, values are percentages

<i>Check one box for each phrase</i>	1	2	3	4	5
13a. I am comfortable using computer technology as part of my coursework.	1.0	3.3	5.7	32.5	57.5
13b. The University provides access to computer technology that would enable me to use digital images.	0.7	6.9	20.4	38.9	33.2
13c. I have a computer (in my office, dorm, or home) that I can use to work with digital images.	5.3	4.5	7.4	22.9	59.9
13d. In relation to my educational activities, digital images generally have significant functional advantages over analog images.	2.4	7.1	30.6	30.6	29.2
13e. Digital images are generally easier to use than analog images.	3.1	9.1	32.2	27.2	28.4
13f. Digital images are generally easier to organize than analog images.	1.7	5.3	34.9	28.5	29.7
13g. Digital images can be used to design assignments that are not possible with analog images.	1.4	4.8	34.9	32.3	26.6
13h. It is likely that I will increase my use of analog images during the next 3 years.	9.1	17.5	40.7	23.4	9.3
13i. It is likely that I will increase my use of digital images during the next three years.	1.0	1.4	22.2	40.4	34.9

The next few questions concern the potential of a digital image delivery system for Penn State. For the purposes of this survey, please make the following assumptions about this system when answering the questions.

Assumptions: Via the Internet, you will be able to search for and retrieve good quality digital images from a system containing a large number of diverse images, including many in your field of study. You will also be able to create sequences, save them, name them, and display images side-by-side for comparison. Images could also be downloaded for use with other software.

Please indicate your agreement with the following statements regarding this type of digital image delivery and manipulation system.

(1 = disagree strongly, 5 = agree strongly)

418 responses, values are percentages

<i>Check one box for each phrase</i>	1	2	3	4	5
14a. This type of image delivery system would be useful for my course work.	1.2	2.2	17.5	33.0	46.2
14b. It would be useful for my independent study and research.	0.7	3.1	18.7	30.5	47.0

The most useful aspect of such a system would be: *(please choose only three)*

15a. ___ It would encourage me to try digital images	113
15b. ___ Access to images from a variety of disciplines	133
15c. ___ Access to a larger number of images than now	203
15d. ___ Reducing my need for storage space	69
15e. ___ Reducing my labor in gathering and managing images	217
15f. ___ No need to travel to an analog collection	90
15g. ___ Copyright & permissions sorted out for me	127
15h. ___ Since I would be using copies, there would be no need to keep track of originals	45
15i. ___ Easier to review and study for tests	94
15j. ___ Easier than checking many separate sources	141
15k. ___ Providing simple presentation tools so that I won't need presentation software (such as PowerPoint)	71
15L. ___ Other: <i>(please explain)</i> _____	10

My greatest area of doubt about the development of such a system is: *(please choose only three)*

16a. ___ That the content of the images collected suit my areas of interest	204
16b. ___ That the documentation of the images will be insufficient	94
16c. ___ That the language used for the images won't match my search terms	154
16d. ___ That it would be difficult to add any new images I want to the system	70
16e. ___ That it would be difficult to use the system's images with those I keep	38
16f. ___ That I will still need a separate system	83
16g. ___ That I won't be able to keep my notes and other data together with the images	103
16h. ___ That it would be too hard to learn to use	115
16i. ___ That the quality of the digital images will be inadequate	99
16j. ___ That such a system is unnecessary, since there are plenty of good digital images available now	105
16k. ___ That still images will be much less important than digital video and animations for my work	25
16L. ___ That other technical matters (access to good equipment, reliable networking, etc.) will interfere	139
16m. ___ Other: <i>(please explain)</i> _____	10

SECTION 4:

17. Level at Penn State: *(please choose only one)*

<input type="checkbox"/> Undergraduate	424 (75.8%)	<input type="checkbox"/> Masters (1 st Year)	<input type="checkbox"/> Masters 2 nd Year	<input type="checkbox"/> Masters (Other)	<input type="checkbox"/> PhD
	7 (1.3%)	32 (5.7%)	12 (2.1%)	84 (15.0%)	

18. Gender:

<input type="checkbox"/> Male	<input type="checkbox"/> Female
232 (41.8%)	323 (58.2%)

19. Race/ethnicity:

<input type="checkbox"/> African-American	<input type="checkbox"/> Asian	<input type="checkbox"/> Hispanic	<input type="checkbox"/> Native American
19 (3.5%)	26 (4.8%)	16 (2.9%)	2 (0.4%)
<input type="checkbox"/> White	<input type="checkbox"/> Other <i>(please specify)</i> _____		
451 (82.6%)	32 (5.9%)		

20. *Optional:* Any comments you may have about any of the topics in this questionnaire, or suggestions for this project, are welcome. Please write in this box.

If you have questions about this survey or the VIUS project please contact Jim Frost, Project Associate (jxf17@psu.edu or 865-6697) or consult the information at <http://www.libraries.psu.edu/pubinfo/news/mellongrant.html>

Thank you for your participation.

James D. Frost
4/2003

Student Survey Demographics

Student Response Rate by Academic Level

Acad. Level	Response rate	Percent of Returned Surveys	Percent of Original Sample
Graduate	30.9	23.8	15.5
Undergraduate	17.1	67.1	79.4
Scholars	36.2	9.0	5.0
All	20.2	100.0	100.0

Student Response Rate by College

College	Response rate	Percent of Returned Surveys	Percent of Original Sample
Arts & Arch	17.6	13.9	15.9
Agriculture	21.7	21.9	20.4
Earth & Min.	22.0	11.0	10.1
Liberal Arts	20.1	53.2	53.5
All	20.2	100.0	100.0